

**Third Progress Report  
to the Board of Executive Directors  
on the Implementation of Management's Action Plan  
in Response to the Inspection Panel Investigation Report on the  
West African Gas Pipeline (WAGP) Project**

**I. Summary**

1. Introduction. On April 25, 2008, the Inspection Panel submitted its Investigation Report No. 42644-GH on the West African Gas Pipeline (WAGP) Project to the Board of Executive Directors. On June 30, 2008, Management submitted its Report and a detailed Management Action Plan (MAP), developed in response to the Inspection Panel's Investigation Report (see Table 2, Para 9). The MAP acknowledged gaps in three key areas: (a) Social Impact Assessment and Mitigation Measures; (b) Environmental Assessment and Mitigation Measures; and (c) Project Supervision.
2. On August 5, 2008, the Executive Directors discussed the above reports and endorsed the MAP proposed by Management. The Board also asked that Management report on the progress in implementing this action plan in six months. The first Progress Report, covering the period August 2008 – January 2009 was submitted in February 2009, and the second covering the period February 2009 – August 2009 was submitted in October 2009. In the second report, the Management proposed reporting back to the Executive Directors in a year's time on progress achieved to date. This third Progress Report covering the period up to January 2011 is being submitted to the Board in response to that decision.
3. Since the last Progress Report in October 2009, substantial progress has been made on the physical works: (i) while Takoradi (Ghana) station had already started free flow gas in April 2009, it was followed by Tema (Ghana) in August 2010; (ii) facilities at Lome (Togo) were pressured up ready to commence free flow in October 2010, while Cotonou (Benin) was completed in December 2010; (iii) all works at Itoki in Nigeria (the inlet point for WAGP system) have been completed; (iv) Lagos Beach Compressor Station (LBCS) is also completed and commissioning activities are underway, after which compressed gas would be delivered to Benin, Togo and Ghana. Free-flow gas, however, has been steadily supplied since March 2010 after repairs to the Escravos-Lagos Pipeline System (ELPS) were completed in Nigeria, and volume ranging between **90 to 100** million cubic feet per day (mmcf/d), has been delivered to Ghana in December 2010. The gas is supplied by Shell Petroleum Development Company (SPDC) and Chevron Nigeria Limited (CNL) in a 50:50 ratio. Both companies have implemented their development plans to meet their obligations for the domestic gas market in Nigeria, as well as their commitments for WAGP.
4. In terms of implementation of the MAP, key accomplishments include:
  - (a) Social resettlement and compliance. Actions **completed** under the MAP, include:
    - (i) some outstanding additional compensation payment for land in Nigeria and Benin;

(ii) a series of needs assessments across the four countries, as a follow up to the baseline survey in Nigeria; (iii) strengthening of grievance and complaint management system; and (iv) continued community pipeline safety awareness and emergency response plan workshops. There are some activities that are **ongoing** and are focused on progressing these to completion: (i) ensuring the functionality and sustainability of the different sub-projects under the Community Development Projects (CDP) component; (ii) developing and implementing livelihood strategies; (iii) ensuring the efficacy of the established grievance redress mechanisms; (iv) strengthening the implementation of agreements set forth in the Memoranda of Understandings (MOUs) with communities and Local Government partners regarding operation and maintenance of sub-project facilities; and (v) establishing an effective system for monitoring and evaluation (see paras 18, 23 and 24. The ongoing activities are expected to be completed over the next 1-2 years, while the project goes into its operational phase).

(b) Aside from actions identified under MAP, the independent Environment and Social Advisory Panel (ESAP) has identified a number of actions which could further strengthen the social compliance of WAGP. **Table -1** provides a summary of the status of implementation of these identified actions.

**Table 1: Social Actions identified by the Environmental and Social Advisory Panel (ESAP) and Follow-up**

<b>ESAP Recommendation</b>	<b>Status as of April 2010</b>	<b>Status as of November 2010</b>
WAPCo organize a short on-site course in community development, using the present projects to illustrate both good and bad practice.	A workshop was organized as part of staff training, including the community development and liaison officers. In one section of the workshop, the findings from the socio-economic survey in Nigeria were presented.	WAPCo has trained its social safeguards staff as a follow up to the second phase of the MIGA-assisted training. A post-training report was submitted by the trainer and is available through the Bank and WAPCo. Adequate social safeguards staff exists in all four countries i.e. Community Relations Representatives ( <b>CRRs</b> ). Another workshop was held prior to completion of the Needs Assessment surveys in Benin, Togo and Ghana as part of follow up and update of the socio-economic (baseline) database of project affected households.
WAPCo secure experienced staff or consultant services to assist in planning and implementing both Phase 3 livelihood restoration, replacement, or betterment of projects and complex long-term benefit-sharing. The latter is a discretionary investment in community development. A program of long-term development investment in displaced communities.	WAPCo has assigned field-based community liaison officers who are in charge of day-to-day follow up of the CDP activities.	Recently, a monitoring and evaluation (M&E) system was set up by WAPCo using a common template. Data entry from the template has been continually saved in a database since August 2010 and summarized in monthly reports. Feedback from the <b>CRRs</b> are also recorded and monitored. M&E system is being further strengthened through community feedback.

<p>WAPCo should negotiate memoranda of understanding for recurrent support and management with the institutions that have enduring responsibility for the community development projects.</p>		<p>Memoranda of Understanding (MOU) have been discussed with the stakeholders, and implementation of agreements set forth in the MOUs with communities and Local Government partners regarding operation and maintenance of sub-project facilities have been strengthened.</p>
<p>WAPCo should transition from 'bricks and mortar' to projects requiring longer term commitment and greater emphasis on support for training, education, and enterprise, as requested by many communities. A program of livelihood assistance to support the income and production of Project displaced households and enterprises, that detailed study may show are falling below the bar of 'no worse off'.</p>	<p>The Year 1 and 2 CDP activities are completed, except for a few sub-projects that were under construction in April 2010.</p>	<p>Year 3 projects have been designed and planned for implementation, focusing on livelihood and income generating activities.</p>

(c) Environmental and safety compliance. Major actions under the MAP have been **completed**; however, with the project transitioning into operations, a number of activities, such as translation of Environmental Management Plan (EMP) for the operations phase, continued training on safety, dissemination of Emergency response Plan (ERP), capacity-building, etc have been re-launched and are currently **ongoing**. Workplace safety continues to be outstanding, thanks to the strong health and safety culture embedded in the project by West African Gas Pipeline Company (WAPCo) from the outset. There are no significant environmental problems, and the environmental agencies from all four countries pronounced themselves satisfied with WAPCo's performance in implementing environmental management plans, and in communicating with them. Pipeline security arrangements have progressed well, with port authorities and navies engaged in all countries in patrolling the route and enforcing the no-anchor zones. WAPCo has embarked on a program of emergency response workshops for concerned agencies in each country; workshops have been completed at Tema and Takoradi, Ghana, and are being scheduled for the other countries. These will be followed by emergency response drills at each location. Several rounds of community safety awareness training have already been conducted, and WAPCo acknowledges that repeat training on a regular basis will be **necessary**.

(d) While all actions under the MAP have been completed, ESAP has identified a number of actions which could further strengthen the environmental compliance of WAGP. WAPCo has taken due note of these actions and is undertaking appropriate measures to address these concerns (**Table -2**).

**Table 2: Environment Actions Identified by the Environmental and Social Advisory Panel (ESAP) and Follow-up**

<b>ESAP Recommendation</b>	<b>Status as of April 2010</b>	<b>Status as of November 2010</b>
Implement shoreline monitoring program at Tema and Takoradi.	Second beach monitoring report dated 2/2010 was presented to and reviewed by the mission.	Second report was submitted to Ghana EPA, World Bank, and ESAP. ESAP provided comments and WAPCo responded. WAPCo has completed another monitoring mission and complete a fourth one prior to year end. Two more monitoring reports will thus be submitted in 2010, which completes the monitoring obligation imposed by EPA. EPA no longer considers erosion caused by the structures related to the pipeline to be matters of concern.
Monitor shoreline erosion in Togo.	MERF updated the mission on the GoT's planned beach stabilization project.	Project initially entails construction of <i>epis</i> (groins) at Aneho and Pemé. GoT is exploring for funding. WAPCo will continue to monitor erosion and planned erosion control activities.
WAPCo should undertake a root cause analysis of the discharge of hydrotest water at Takoradi.	WAPCo will continue to ensure adequate Environmental and Social due diligence in carrying out hydrotest water discharge.	All remaining hydrotesting completed without incident. Mission confirmed with environmental agencies in the four countries that they had been informed of and, where they chose to, had witnessed hydrotests,
Adequate emergency response plans and staff training have been completed. Additional attention to gas releases off site is needed.	WAPCo plans additional training at community level to ensure sufficiently wide dissemination of safety information.	Awareness is uneven from one community to another – good in Gbetsogbe, Togo, for example, poor in Edo, Nigeria, mixed in Benin. WAPCo is scheduling additional training with better targeting for communities. WAPCo has held safety workshops including presentation of the ERPs with government agencies including EPA offices in Tema and Takoradi, Ghana. Similar sessions are scheduled for Benin, Nigeria and Togo. WAPCo plans drills on ERP implementation sometime after the workshops.
Maintain vigilance in monitoring activities near the pipeline to minimize interference with its integrity.	WAPCo will continue all activities noted, particularly the outreach program to Ghanaian fishing associations, on which it is collaborating with the Navy.	MERF and Togolese Navy have conducted simulated emergency response drills for pipeline accidents. WAPCo is planning emergency response drills for agencies in all four countries.

(e) Institutional issues and project supervision. Concerted efforts have been made to **strengthen institutional capacity, and intensify project supervision**, as follows: (i) WAPCo has taken steps for a smooth transition from the construction to operational phase; (ii) training on environmental and social safeguards has been provided to WAPCo staff and the contractors; and (iii) the Bank's task team has undertaken two supervision missions per year during the past three years, and continuous follow-up has been maintained.

5. The way forward. While the project is in an advanced stage of completion, the only major challenge in implementing the MAP relates to the development and operationalization of livelihood restoration strategies, and ensuring the functionality and sustainability of the CDPs. Community awareness and consultation is an ongoing process and engagement of Local Government partners is a way to ensure CDPs would be

sustainably utilized. Establishing an effective system for monitoring and evaluation (M&E) could provide useful pointers for corrective actions going forward. Work on CDPs is expected to be completed over the next two years, and livelihood restoration strategies and M&E systems would be developed and operationalized during the same period. Going forward, the local government and communities would take ownership of these facilities and programs for their continued operations in the future.

6. Two issues external to the Project that can enhance the value of the project for the contracting countries are: (i) Government of Nigeria's attention to address vulnerability of the gas transmission infrastructure in Nigeria feeding gas to WAGP; and (ii) increasing gas throughput in the pipeline over and above the 133 mmcf/d currently planned to meet projected higher demand for gas by Benin, Togo and Ghana. The project incentives are structured to promote transportation of higher than foundation gas volume of 133 mmcf/d, and take-or-pay obligations are built into the relevant contracts. Quantities over and above the foundation volume are also to be governed by similar commercial contracts, as for the foundation volume for transportation through the pipeline, delivery and off-take by the customers, thus incentivizing all parties (suppliers, transporter, and consumers). The Bank Task Team has drawn attention of all stakeholders to the contractual framework, and is encouraging them to enter into commercial negotiations for any additional supplies.

## **II. Project Description and Status of Gas Delivery**

7. **Project Description.** The Project is one of the Bank's major ventures into public-private partnership involving four countries (Nigeria, Benin, Togo, and Ghana), but with limited risk coverage. It combines a risk mitigation strategy through an IDA Partial Risk Guarantee (PRG) of US\$50 million, with respect to gas purchases of Ghana's Volta River Authority (VRA); a Guarantee from the Multilateral Investment and Guarantee Agency (MIGA) of US\$75 million; and commercial insurance to back the credit risk of VRA. The Project was approved by the Board on November 23, 2004<sup>1</sup>. The IDA PRG insures a portion of the VRA obligations to WAPCo under the Takoradi Gas Sales Agreement (TGSA) in the event where a failure by VRA to pay the Nigerian gas purchaser, N-Gas Limited, results in N-Gas terminating the TGSA. However, the IDA PRG does not cover breach of other obligations undertaken by VRA or Ghana under the Project agreements. In terms of the regional energy scheme, which notably decreases input costs and diversifies fuel supply for the power sector, the Project is expected to expand investments in local industries and enterprises in the four participating countries. The use of a cheaper and more benign energy source is expected to provide cost savings to users, and develop the economy through competitiveness and regional trade.

8. The Project consists of: (i) a 678 kilometer long pipeline that transports gas from Nigeria to Benin, Togo, and Ghana; (ii) lateral spurs from the main pipeline that move gas to power generating units in Ghana, Benin, and Togo; (iii) conversion of existing power generating units to gas (financed by their owners); and, as needed, (iv) additional

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<sup>1</sup> Its total estimated cost at the time was US\$ 590 million.

compression investments. These are developed to meet the expected market potential of about 450 mmcf/d, with a pipeline diameter of 20 inches. The main trunk of the offshore pipeline is in the seabed, between 26 and 70 meters below the ocean surface, and at an approximate distance of 15 to 20 kilometers from the shore. Gas is transferred through lateral spurs, and the terminal of the pipeline is at the Takoradi Power Station in Ghana. The total area of land take was estimated at more than 200 hectares, with over 3,000 households within the right of way (ROW), 70 percent of which lies in Nigeria.

9. **Status of Gas Supply.** The line was packed with gas during December 2008 – March 2009. Free flow gas volume of 30 mmcf/d was delivered to Takoradi Power Company (TAPCO) during April 26 – May 16, 2009, and Turbine 1 switched from liquid fuel to gas during this period. The gas supply from Nigeria was interrupted from May 16, 2009 onwards on account of the vandalization of the ELPS in Niger Delta. Repairs to ELPS were completed in March 2010, and supplies of 50-70 mmcf/d (increasing to 90-100 mmcf/d in December 2010) have continued to Ghana (both at Takoradi and Tema) have continued since then. The Federal Government of Nigeria (FGN) declared a general amnesty to the militant groups in Niger Delta and initiated dialogue with groups ready for a peaceful resolution of issues; announced a socio-economic development program amounting to Naira 60 billion (approximately USD 390 million) in the first phase; stationed additional security forces in areas affected most by militant actions; and provided security to personnel operating and repairing the infrastructure facilities in the restive areas. These actions have greatly contributed to the increased supply of gas to the Nigerian domestic market, as well supplies for WAGP. FGN is also undertaking the augmentation of the gas transmission infrastructure in Niger Delta to mitigate some of the supply risks.

### III. Management Action Plan Implementation

10. The MAP is divided into sections referring to social safeguards compliance; environment safeguards compliance; and supervision. This section describes the specific actions undertaken and the status of implementation, as shown in **Table -3** below, followed by a more detailed description specific follow-up activities.

**Table 3: Implementation of Management Action Plan**

ACTION	STATUS
<b>Social Impact Assessment and Mitigation Measures</b>	
1. WAPCo to undertake consultations and sensitization of communities on the method for livelihood restoration compensation; and community development programs (15 completed by June 2008; consultations with affected communities to be an ongoing process). The field-based social specialist has observed some of the consultations. Management will undertake monthly follow-up, starting in July 2008 until completion of the compensation process.	1. <b>Completed.</b> Consultation and sensitization of communities was completed prior to start of the payment process in September 2008; field-based Bank staff undertook monthly visits to the project site until February 2009.

<p>2. WAPCo prepared a program on livelihood restoration, including the methodology for additional compensation for livelihood restoration for PAPs using four zones; verification of PAPs and intra- and inter-household access and claims completed in May 2008; payments to be distributed to PAPs by October 2008. Management will carefully monitor this program, including through monthly field visits and the supervision mission (in Dec 2008).</p>	<p><b>2. Completed.</b> WAPCo conducted a satisfactory payment process in Nigeria for additional compensation, and only litigation cases remain; the payment process was observed by the Bank team as well as the Witness NGO; monthly field visits were undertaken to receive feedback from the PAPs. Additional compensation payment in Benin has also been completed.</p>
<p>3. An update of the socio-economic survey to be completed by December 2008; with a follow-up survey update in 2010 (at the end of RAP monitoring period to assess income and livelihood impacts). The Bank will review survey methodology and results, which will be validated by an independent consultant.</p>	<p><b>4. Completed</b> in Nigeria. The findings from the socio-economic survey in Nigeria were presented in a workshop organized by WAPCo, and a summary will be translated into local languages and presented to communities. The Bank has reviewed the survey methodology and results, and they have been validated by an independent consultant. Needs Assessment surveys have also been finished in Benin, Togo and Ghana to complete the socio-economic (baseline) database of project affected households.</p>
<p>5. WAPCo hired IITA Agricultural Economist who has submitted a report on adjusted crop and tree prices, which has been reviewed and found acceptable to the Bank.</p>	<p><b>4. Completed.</b> This activity was completed prior to start of actual payment, and consultants from IITA provided inputs to the valuation of crops and trees (in September 2008).</p>
<p><b>5.</b> WAPCo to undertake compensation of crops and trees (based on updated market rates), adjusted for inflation to 2008 prices, and applying 4 differentiated land use zones and the most current IITA/FAO agricultural prices in Nigeria, by October 2008. Management will review the prices before compensation payments are made.</p>	<p><b>5. Completed.</b> The adjusted crop and tree compensation and land valuation was calculated based on IITA/FAO and market prices; the process of actual payments was completed in September 2008. Management reviewed the prices before the compensation payments were made.</p>
<p>6. WAPCo to intensify CDP implementation strategy, focusing on livelihood restoration; skills development; and activities targeted for vulnerable groups. (August 2008). The CDP will be further modified, based on the findings of the updated socio-economic surveys in 2008 and 2010. Management will carefully monitor the CDP implementation strategy, through ongoing field visits and the December 2008 supervision mission.</p>	<p><b>6. Ongoing.</b> CDP projects for Year 1 and 2 are largely complete and are being audited; Year 3 projects will focus on livelihood and income generating activities. Ensuring the functionality and sustainability of the different CDP's, and renegotiating MOU's with communities and Local Government partners, is currently underway.</p>
<p>7. WAPCo to document modifications to CDP activities to specifically address needs of vulnerable groups</p>	<p><b>7. Ongoing.</b> The community relations representative (CRR) in Nigeria was given additional responsibility as a focal point person for vulnerable groups; and during the compensation period, 64 households were identified. However, for Benin, Togo and Ghana, the CRRs have not been assigned similar responsibility to cover vulnerability issues; WAPCo has been asked to assign similar responsibilities to the CRRs at the earliest.</p>

<p>8. WAPCo to ensure full disclosure of livelihood restoration compensation (underlying reasons, methodology, calculations, payment process, grievance handling) during community sensitization meetings (Ongoing, fifteen community meetings held in May and June 2008). Management will monitor progress in disclosing relevant information on compensation.</p>	<p>8. <b>Completed.</b> Full disclosure of additional compensation was done prior to the start of additional payment in September 2008. Witness NGO oversaw the payment process, and their report is publically available. WAPCo has also agreed to the public disclosure of the Bank's WAGP Aide Memoire (in keeping with Bank's Disclosure Policy).</p>
<p>9. WAPCo to continue to discuss with communities the results of RAP Audit (conducted in 2007) and submit RAP monitoring and consultation updates as part of its monthly progress report (as provided in the Project's monitoring and evaluation plan) to the Bank.</p>	<p>9. <b>Ongoing.</b> An appropriate monitoring and evaluation (M&amp;E) system was set up by WAPCo using a common template. Data entry from the template is saved in a database and summarized in monthly reports. Feedback from the CRRs is also recorded and monitored. M&amp;E system is being further strengthened through community feedback.</p>
<p>10. WAPCo to hire an independent monitor (witness NGO) by early July 2008 to document and witness the payment process for livelihood restoration additional compensation.</p>	<p>10. <b>Completed.</b> Witness NGO (Nigeria Network of NGOs or NNNGO) observed and documented the compensation process and found it satisfactory and transparent.</p>
<p>11. WAPCo to ensure that the grievance mechanism includes information on accessible procedures for third party settlement of disputes arising from compensation and other aspects of the RAP, and improved documentation of dispute resolution (nature of disputes, parties involved, duration/timing) (July 2008). The Bank field visit in August 2008 will assess the effectiveness of the grievance mechanism.</p>	<p>11. <b>Completed.</b> The grievance mechanism has been working, and complaints are being resolved within agreed time period. During 2010, WAPCo registered 18 complaints and 75% of these were resolved within a period of 14 days in Nigeria.</p>
<p>12. WAPCo to engage in participatory consultations with affected communities on the grievance mechanism and revise the procedures, as appropriate, based on feedback</p>	<p>12. <b>Ongoing.</b> The consultative process on the grievance mechanism is ongoing, but, to date, there have been no complaints and the grievance mechanism is working.</p>
<p>13. WAPCo is ensuring that its social safeguards personnel are being adequately trained in RAP monitoring, as well as in the monitoring and evaluation of safeguards compliance and of the community development program. At the same time, WAPCo is increasing its social safeguards staff through the recruitment of 2 staff in Nigeria and one staff member in Ghana in June 2008. One staff each in Benin and Togo are also being trained to handle the social safeguards issues. Management will assess, on an ongoing basis, the safeguards capacity in WAPCo and other partners (e.g., local groups, witness NGO).</p>	<p>13. <b>Completed.</b> WAPCo has trained its social safeguards staff through the second phase of the MIGA training in June 2009. A post-training report was submitted by the trainer and is available through the Bank and WAPCo. Adequate social safeguards staff exists in all four countries (Community Relations Representatives).</p>
<p>14. WAPCo safeguards staff to participate in the IFC capacity building program organized by IFC</p>	<p>14. <b>Completed.</b> WAPCo sent two senior staff to participate in the IFC capacity building program in April 2008.</p>

<p>15. WAPCo to utilize an institution-building program/grant from MIGA by September 2008.</p>	<p>15. <b>Completed.</b> MIGA training was done in two phases. There was an analysis of the institutional arrangements for monitoring and evaluation in August 2008. This was followed by a training workshop for livelihood restoration in June 2009.</p>
<p><b>Environmental Assessment and Mitigation Measures</b></p>	
<p>16. Management to ensure that ESAP is retained up to July 2009, to encompass remaining construction period and initial operations.</p>	<p>16. <b>Completed.</b> ESAP's next visit and perhaps final visit will take place after commissioning of the LBCS.</p>
<p>17. WAPCo to translate the Executive Summary of the EMP for operations into Yoruba and disseminate it among the communities by August 2008. Management will monitor the dissemination of the EMPs during its monthly field visits.</p>	<p>17. <b>Completed/Ongoing.</b> The Executive Summary of the EMP for construction related operations/ activities has already been translated into Yoruba and distributed in Nigeria. As the project translates into operations phase, the summary of the EMP for operations has just been completed. It will be translated into Yoruba and French and disseminated to local communities in Nigeria, Benin, Togo, and Ghana prior to commissioning of the LBCS.</p>
<p>18. Management to endeavor to obtain annual data from DPR and NNPC by December 2008, on the respective volumes of associated and non-associated gas to WAGP through ELPS.</p>	<p>18. <b>Completed.</b> Data on volumes of associated and non-associated gas has been obtained from DPR for 2008. DPR agreed to provide the Nov. 2010 mission with corresponding data for 2009.</p>
<p>19. WAPCo to conduct ERP awareness meetings with stakeholders and communities near WAGP facilities, prior to first gas (To be completed in June 2008).</p>	<p>19. <b>Completed.</b> WAPCo conducted ERP awareness briefings for more than 170 community residents in Nigeria and Ghana. VRA safety and environment staff from the Takoradi plant participated in the community briefings in Ghana.</p>
<p>20. WAPCo to produce a safety brochure, translate it into local languages, and widely disseminate it (July 2008).</p>	<p>20. <b>Completed.</b> WAPCo has completed production of the safety brochure, translated it into Yoruba and distributed 500 copies in Nigeria.</p>
<p>21. Additional public awareness meetings to be held in the future, and printed information on relevant aspects of the ERPs to be distributed (Ongoing). Management will monitor the ERP awareness activities through regular field visits.</p>	<p>21. <b>Completed.</b> However, Nov. 2010 mission findings indicated that in Nigeria, awareness is uneven from one community to another. WAPCo will conduct follow-up sessions designed to reach all communities.</p>
<p><b>Project Supervision and Management</b></p> <p><b>Mission duration, frequency, and expertise (OP13.05)</b></p>	
<p>22. Management to ensure a minimum of two Bank supervision missions of 10-14 days' duration during the remaining construction period of the Project, with more frequent/continuous formal and informal supervision. In addition to technical, financial, and economic specialists, Bank supervision missions to include environmental and social safeguards specialists (by December 2008 for the first mission; by April 2009 for the second mission)</p>	<p>22. <b>Completed/Ongoing.</b> Two supervision missions per year have been taking place since 2007; technical, financial, environmental, and social specialists have participated in the missions; monthly field visits continued until February 2009; and regular updates on the project are provided to AFR Management.</p>

<p>23. Management input and coordination with the Country Office in monitoring the Project to be strengthened with periodic reviews of Project Implementation (ongoing). Management to allocate adequate budgetary resources for the supervision effort – about 3 times the normal supervision budget (FY08 and FY09)</p>	<p>23. <b>Completed.</b> A project supervision strategy was approved by Management in August 2008; task management was transferred in the field since 2008; supervision budget has been increased to two times the normal budget.</p>
<p><b>Supervision of public private partnerships, actions on early warning signs – resources for supervision, handling of complex regional projects (OP13.05)</b></p>	
<p>24. Management to document, based on WAGP experience, the lessons learned on supervision of public private partnerships, and to bring this to the attention of project teams handling similar complex projects</p>	<p>24. <b>Completed/Ongoing.</b> A Bank-wide seminar and meeting with Bank staff and Inspection Panel members was organized in Washington DC; and WAGP experiences and lessons learned have been shared at other forums.</p>
<p>25. Management to undertake in the future a more comprehensive evaluation of the sector environmental and social issues for projects involving new borrowers/sponsors in a complex sector with many actors/participants.</p>	<p>25. <b>Completed/Ongoing.</b> Africa Region environment and social issues analyzed through country portfolio reviews; special review of regional projects has been initiated; lessons of WAGP have been incorporated in the Nigeria Electricity &amp; Gas Improvement Project, Ghana Oil &amp; Gas TA, and other operations.</p>
<p>26. Management is developing “best practice” tool kits to assist task teams in the Africa Region to navigate process challenges and to better achieve high standards of implementation monitoring in complex regional programs (to be completed by the end of FY09).</p>	<p>26. <b>Completed/Ongoing.</b> Africa Region energy, environment, and social websites completed; the Region has started compiling documentation of best practice cases in energy sector and regional projects; good practice workshop on lessons learned in WAGP took place in June 2009; Africa Region safeguards training (mobile clinics) completed in FY08 and FY09.</p>

### Social Safeguards

11. WAPCo has **completed**: (i) additional payments in Nigeria and Benin (as of April 2010); (ii) socio-economic survey and establishment of the baseline in Nigeria, and updates of the baseline survey for all countries; (iii) needs assessment surveys in all four countries; (iv) initial livelihood enhancement and community development programs for all countries, with a focused evaluation of the CDP sub-projects in Nigeria; (v) consultation and stakeholder participation and actions coordinated through field-based staff; (vi) special programs for addressing the needs of vulnerable groups and to facilitate their participation in CDP activities to the vulnerable groups to facilitate their participation in compensation process; (vii) a review of the functionality of the grievance mechanism, ensuring that resolution of disputes is acceptable; and (viii) the basic infrastructure and process for an effective monitoring and evaluation system.

12. Additional compensation. The work is **completed** and the Task team has visited and evaluated post-compensation conditions of affected households in Nigeria. This included a discussion of the compensation process and procedures that were used in the payment process concluded in late 2009. Concrete steps were undertaken during the compensation for land, crops and trees to achieve the fundamental objectives of paying directly to the PAPs through on-site due-diligence, disclosure and transparency. During the payment process, steps were taken to identify all of the persons who were affected (including any who may lack formal title to affected property), and inventory and full valuation of assets. Payment was made directly to each affected household, and processes of grievances' redressal were established and explained, including documentations of court action, as applicable. The November 2010 mission has established that the top-up compensation process in Nigeria was transparent and appropriately carried out, in particular, addressing the risks of elite or political capture. All the payments have been made in accordance with the agreed procedures specified in the legal and regulatory frameworks of Nigeria and Benin, and aligned with the World Bank OP 4.12 (Involuntary Resettlement) and under the observation of an experienced witness NGO.

13. Compensation process in Nigeria. The following are the salient statistics related to the additional compensation process that was completed in Nigeria:

- (a) Number of cheques issued: 2,255
- (b) Number of Payees: 2,180
- (c) Amount disbursed: 332,542,605.96 Naira<sup>2</sup>
- (d) Outstanding payees: 107
- (e) Outstanding Amount: 72,000,064.40 Naira
- (f) Payments to royal and community rights, or to estate agents (interlocutors): None.
- (g) Mode of payments for property owners: Use of four zones of payment; majority of claimants filed claims for crops and trees.
- (h) Approach used in Payment Process: Within each "property/parcel of land" transparent process of allocating payments (intra- and inter-household) was followed, and validated in the presence of WAPCo representatives, local and traditional leaders, and other observers. By establishing this transparent and accountable compensation process, the project incorporated the requirements of OP 4.12 and Nigerian custom.
- (i) Duration of resolution of Problems (e.g. compensation rates, inventory of claimants): Less than a month from the time the problem was registered in the grievance log; two villages are still resolving disputes on their own (through litigation) and WAPCo has indicated it will pay only once the court cases are resolved.

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<sup>2</sup> 1 US\$ = 153.4 Naira (as of March 2, 2011).

(j) Observation: A witness NGO participated in the payment process as an independent third party.

14. Additional compensation in Benin. The payment process for Benin was **completed**, and specifically from March 2010 to date, three categories of additional compensation payments have been made, as follows:

- (a) Top up payment to PAPs who have more than 50% of their land affected.
- (b) Livelihood restoration to farmers whose farms have been affected by the ROW.
- (c) Payment to PAPs within the acquisition of 10 metres in the R&M Station Buffer zone (demolition fees to owners of affected structures equal to 20% of building value).

15. Details of the status of additional compensation payment in Benin are provided in **Table -4**.

**Table 4: Status of Compensation Payment in Benin**

Compensation	Amount (FCFA) <sup>3</sup>	No. of Beneficiaries
Top up Payment	58,042,331	93
Livelihood restoration	4,744,000	15
R&M Station Buffer zone	58,423,331	10
Total	121,209,662	118

16. Socio-economic Baseline Survey and Follow Up. The baseline socio-economic survey in Nigeria was **completed** in May 2010 covering the households included in the additional compensation process. This baseline survey has since been updated through Needs Assessment surveys. It was also envisaged by WAPCo that the livelihood restoration activities and community development projects would be reassessed every year to incorporate findings of the recent socio-economic survey and needs assessments. It was also agreed that WAPCo would share the findings of the surveys and assessments with the communities, which is yet to be done pending completion of a communications strategy. The main findings and recommendations of the socio-economic survey are important to be discussed with communities as these: (i) focus more on employment/income generating opportunities through skill training, micro credit schemes, etc for which their inputs on how best to implement these schemes would be critical; (ii) target vulnerable groups such as female-head households, especially those headed by widows, the elderly and physically disabled, and for whom programs need to be implemented immediately; (iii) establish communication channels with community members to explain what WAPCo is doing and responsible for, and facilitate community participation in the implementation of the CDPs; and (iv) indicate provision of infrastructure such as roads and electricity as a major priority and where suggestions

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<sup>3</sup> 1 US\$ = 474 FCFA (as of March 2, 2011).

from communities are needed to ensure that they are appropriately designed. Such a discussion could also facilitate sharing of experiences and lessons from the Bank-funded community driven development (CDD) approach of Fadama II and CSDP, and involve local communities in the project identification, decision making and implementation.

17. For Benin and Togo, WAPCo **completed** an impact assessment of CDP's, and livelihoods-related needs assessment of project communities. However, the findings are yet to be operationalized in terms of specific activities and institutional set-up for carrying out these activities. There is need for training of the Community Relations Representatives of WAPCo to take over the responsibility of being the focal person for vulnerable groups (including elderly persons, single women, etc), including the necessary skills to implement the types of programs envisaged under a livelihood strategy. Further collaborative actions between the World Bank and WAPCo would be undertaken to support capacity building, wherever required.

18. Community Development Projects. The implementation of the Community Development Projects (CDPs) is **ongoing**. More work needs to be done to get the majority of CDP sub-projects' functional, and as noted by the ESAP social expert, there is need then to ensure ongoing sustainability of these sub- projects. For example, there remain CDPs with small infrastructure (such as clinics; market blocks; etc) that have been constructed for community use but are still not functional in terms of a local institutional mechanism for operating and maintaining these facilities. The current status of CDPs in the participating countries is as follows:

- (a) Nigeria: A total of 28 projects; 14 out of the 28 have been completed and operational; and 11 outstanding projects are on-going or near to be awarded.
- (b) Ghana: A total of 16 projects in about 7 communities; 11 out of the 16 have been completed and operational; and 2 completed and yet to be handed over.
- (c) Benin: A total of 16 projects in 13 Communities; 6 of the 16 are completed and operational; 6 are at various levels of completion and arrangements are underway to make them functional; and 4 are scheduled to be re-awarded by year-end.
- (d) Togo: A total of 3 projects in 1 community; 1 out of the 3 have been completed and operational; and 2 completed and yet to be operational.

19. WAPCo is following up on the CDP, so as to reduce implementation delays and ensure sustainability of assets and operations. Some of the actions needed in this regard are beyond their control, however, and require actions by local government authorities. The following actions have been agreed by WAPCo as critical for strengthening of the CDP: (i) development of stronger linkages and communication channels with government and communities, establishing a clear understanding of corresponding roles in the ongoing management and maintenance of CDP sub-projects; (ii) revalidation of the results of various needs assessments conducted by WAPCo in conjunction with a discussion on updating the existing MOU's with different communities; and (iii) agreement for the addition of new activities by the local authorities, wherever warranted, by evidence of progress in operating and maintaining the sub-projects.

20. Livelihood restoration activities. While some progress has been made on mapping out needs of the communities, the livelihood activities have **not been completed** to date.

WAPCo is still in the process of developing specific livelihood interventions - income earning activities, skill acquisition, scholarship schemes, vocational training, micro-credits scheme, etc. Targeted assistance and special follow up of livelihood support will be needed since communities are concerned about the status of livelihood restoration activities, which are part of their existing MOU's. Delays in implementing livelihood restoration activities have resulted in continued development of physical assets rather than human capital. WAPCo realizes the importance of skills acquisition and development as a way for sustainable social development, and expects to complete these activities over the next 1-2 years.

21. Consultation and stakeholder participation. WAPCo **completed** several disclosure, consultations, and participatory programs through its Community Relations Representatives (CRRs). Feedback from these consultations is recorded in a database. Together with the survey results, feedback continues to be summarized and disseminated through village and focus group meetings. In Togo and Benin, the CRRs have organized community monitoring committees that provide timely comments on CDP and livelihood related programs.

22. Programs for Vulnerable Groups. A vulnerable groups coordinator (or "point person") in Nigeria has **completed** targeted programs for vulnerable people who belong to the categories of youth, women, disabled, or seriously ill. WAPCo is in the process of recruiting a vulnerable group coordinator for Benin, Togo, and Ghana. Programs for vulnerable people will be started under Phase III of the CDP. Examples of such programs are skills training for youth in all four countries; self-reliance reinforcement management proposed for Togo; women and youth agricultural sub-projects like vegetable farming near Gbesogbe primary school in Togo; and support for women's fish drying ovens in Takoradi, Ghana.

23. Grievance mechanism. The grievance resolution process is **ongoing**. PAPs are able to file their complaints either through their community leaders or the CRRs who visit their villages on a weekly basis. WAPCo maintains a template for tracking grievances, indicating the date of filing; nature of complaint; persons involved; and date and manner of resolution. As of April 2009, for example, in Nigeria, 21 complaints were registered and 80% of these were resolved within a period of 1 to 4 months. Examples of grievances that remained unresolved for over 3 months covered difficult issues such as labor, wage, or contractual disputes with a former contractor and some undocumented land titling or land claims. There will continued evaluation of the effectiveness of the grievance mechanism, which is part of the yearly CDP review process.

24. Monitoring and evaluation system. There is an **ongoing** monitoring and evaluation (M&E) system, which applies a template for assessing the quality of community infrastructure as measured in terms of usage; degree to which the service meets local needs; and peoples' perception of the service. These are then compiled in a centralized database. These measures are supplemented by information gathered from the socio-economic surveys; feedback from weekly village meetings and consultations (documented in CRR progress updates); and audits (WAPCo hired a consultant to do the audit of community infrastructures).

25. Way forward. WAPCo is committed to a participatory community development approach. The following actions will be undertaken, in particular, during the next 6 to 12 months. First, WAPCo will make remaining compensation payments which are held up on account of grievances or court cases (amounts already verified, negotiated, and available in an escrow amount). Second, WAPCo will complete the audit of the CDP infrastructure sub-projects; initiate the repairs; and finalize operating and maintenance arrangements with service providers. This includes a review of the effectiveness in carrying out the activities by responsible parties as specified in the agreed MOUs. This includes a review of the effectiveness in carrying out the activities by responsible parties as specified in the agreed MOUs. Third, the CDPs will enhance skills training and WAPCo will appoint a vulnerable groups coordinator, especially in the areas of youth employment; women's livelihood; and support to disabled populations (e.g. scholarships to the Badagry skills acquisition center and other skills enhancement programs). Fourth, WAPCo will coordinate local government agencies in the critical areas of security and protection of facilities and segments of the pipeline, as initiated by the Governor of Lagos State.

### **Environmental Safeguards**

26. All major actions under MAP have been completed; however, with the project transitioning into operations, a number of activities (such as translation of EMP for the operations phase; continued training on safety and dissemination of ERP; capacity-building; etc) have been re-launched and are currently ongoing. The following paragraphs present an account of the achievements over the past six months.

27. Workplace Safety. Workplace safety continues to be **outstanding** at all locations (Itoki, Badagry, Cotonou, Lome, Tema and Takoradi) thanks to the strong health and safety culture WAPCo embedded in the project from the outset. All sites are clean and orderly, safety briefings are held at the beginning of each site visit, and compliance with rules on personal protection equipment (PPE) use appears universal. The company reports 1,035,088 man-hours worked from April 10, 2010 to date without a lost-time accident.

28. Community Safety. Several rounds of community safety awareness training have already been **conducted**, and WAPCo acknowledges that repeat training on a regular basis will be necessary. In addition, WAPCo is planning in the next round to go directly to smaller groupings of communities in Nigeria to ensure that no community is missed. VRA continues to conduct joint safety training with WAPCo at Takoradi and Tema and has, in addition, conducted training for its staff and contractors on WAPCo's Emergency Response Plan.

29. Offshore Pipeline Security. Pipeline security arrangements have **progressed well**, with port authorities and navies engaged in all countries in patrolling the route and enforcing the no-anchor zones. British Admiralty navigational charts now show the buoys that mark the pipeline as well as the no-anchor zones that were already delineated on them. The buoys will soon be shown on French and U.S. charts as well. WAPCo has embarked on a program of emergency response workshops for concerned agencies in each country; workshops have been completed at Tema and Takoradi, Ghana, and are

being scheduled for the other countries. These will be followed by emergency response drills at each location. WAPCo and the Ghanaian Navy have made some progress in convincing the fishing communities of the dangers of illegal fishing with explosives near a gas pipeline.

30. Environmental Monitoring. WAPCo **has engaged** Environmental Resources Managers Limited (ERML), a highly-reputed Lagos-based consulting firm, to conduct routine monitoring of ESMP implementation and environmental quality during the remainder of the construction period. The arrangement is working very well, and ERML has submitted the reports of its first round of monitoring in Benin, Togo and Nigeria and is presently in the field in Ghana. The review of the draft report for Togo confirms it is of excellent quality and shows nearly complete compliance with relevant ESMP actions and no significant changes in environmental quality since 2004. In addition, ERML has been called on by WAGP to carry out specialized monitoring for sensitive activities, such as discharge of hydrotest water in LBCS, Nigeria and the repair of the break in the offshore pipeline at Lome. WAGP also engaged SGS for the monitoring of discharge hydrotest water in Takoradi R&M Station (which was carried out with no problems and witnessed by Ghana EPA).

31. ERML will be on site to monitor water quality when the 8-inch gas lateral line is installed across the lagoon in Benin. WAGP has designed ERML's contract to build capacity in the four countries, by means of: (i) subcontracting a local expert from each country to serve as the ESMP coordinator, who will work with WAGP's HSE officers and environmental specialists; (ii) providing hands-on training in sample collection and use of field monitoring equipment to local technicians and the Health, Safety and Environment (HSE) officers; and (iii) acquiring laboratory equipment to be used by and left in the custody of the university laboratories that ERML has engaged in each country to perform lab analysis and, in the case of sound meters, with the environmental agencies. The latest monitoring reports, which indicated a generally good level of compliance, were submitted for the participating countries as follows: (i) Nigeria - November, 2010; (ii) Benin and Togo - August, 2010; and (iii) Ghana- September, 2010. As the project translates from construction into operations phase, WAPCo, with the help of ERML, prepared a monitoring plan detailing the different environmental parameters that would be monitored, the frequency of observation and reporting obligations in accordance with operations-phase EMP.

32. However, ERML's contract would end on January 31, 2011. Subsequently, WAPCo has launched the procurement process for the engagement of four environmental monitoring firms (one per country). WAPCo's second report on beach erosion at Takoradi and Tema, in Ghana was submitted to Ghana EPA, World Bank, and ESAP. ESAP provided comments and WAPCo responded. WAPCo has completed another monitoring mission and will complete a fourth one, prior to the year-end. Two more monitoring reports will thus be submitted in 2010, which completes the monitoring obligation imposed by EPA.

33. Implementation of Environmental and Social Management Plans (ESMPs). The recently-concluded Bank supervision mission did not observe any significant

environmental problems at any of the locations along the pipeline, and the environmental agencies from all four countries pronounced themselves **satisfied** with WAPCo's performance in implementing environmental and social management plans, and in communicating with them. Beach erosion has stopped at Takoradi as a result of the partial berm removal, and there has been additional accretion in the previously eroding area immediately down-current from the pipeline shore crossing. EPA informed the mission that it no longer considers erosion caused by the structures related to the pipeline to be matters of concern. .

34. Reporting. The environmental agencies in the four countries are **satisfied** with communications from WAPCo.

35. Environmental Management in the Transition from Construction to Operation. This transition has been **smooth**; the recent supervision mission did not observe lapses in safety practices or environmental management at any location.

36. Way forward. The progress in ESMP implementation, environmental monitoring, collaboration with regulatory agencies, reporting and information management has been substantial since December 2008. There are no significant shortcomings requiring attention at present; however, Management has suggested that WAPCo devote its attention to the transition issues and in particular, consider the following: (i) filling of the vacancy of the Regulatory Compliance Manager; (ii) engagement of counterparts for the two Environmental & Regulatory Compliance Specialists; (iii) formulation and implementation of a practical and durable, long-term impact and compliance monitoring program; and (iv) implementation training for any operations staff members that have not attended an ESMP workshop. WAPCo has concurred with these suggestions.

### **Supervision (AFR Region and Project)**

37. Management in the Africa Region has continued to ensure strong oversight of the Project, and received and reviewed periodical progress reports. The Country Directors in Nigeria and Ghana, and Country Managers in Benin and Togo, have closely monitored progress on the Project. The Task team has been predominantly located in the field but has received advice and guidance from the Sector Manager, Sector Director and the Regional Vice President. Following is the progress:

- (a) Bank supervision missions. Two full-fledged Bank supervision missions per year, comprising of professionals from the HQ and the field, have been taking place since 2007. The missions have reviewed physical progress, and compliance with the environmental and social safeguards by WAPCo. Particular attention has been paid to the review of progress on the implementation of action agreed MAP. While the implementation of environmental actions is complete, there are some residual actions in complying with the social safeguards (see paragraph 18).
- (b) Supplemental field visits. The task team undertook monthly field visits, and undertook consultation with the PAPs up to February 2009 (at the time of submission of the first six-monthly Progress Report). Bank professionals have also witnessed the top-up compensation payment sessions, as and when these were organized.

38. Implementation of Management Action Plan. Table -3 provides a comprehensive account of actions taken during the last six months.

#### **IV. Outstanding Issues and Way Forward**

##### **Gas Supply**

39. Gas infrastructure in Nigeria. The domestic sector is faced with gas processing and transmission infrastructure constraints. The existing infrastructure is old and requires rehabilitation and upgrading. Most of the gas transported from the fields to the market is through the ELPS, and little or no system redundancy is currently available. The fields in East and West Niger Delta are presently not connected. Conscious of these infrastructure issues, FGN announced a new Gas Policy 2008 under which price rationalization, institutional restructuring, and private sector investments were envisaged. While the policy actions have enhanced gas supplies for domestic market and exports, progress on infrastructure development has been slow due to funding issues.

40. Expectation of gas supply in excess of foundation volume. The power utilities and IPPs in Benin, Togo and Ghana are expecting gas in excess of the foundation volume (133 mmcf/d) in view of projected demand from new facilities now under development. At present no contracts beyond the foundation volume exist between NGas (the purchaser of gas from SPDC and CNL) and such potential customers. However, all parties - the owner consortium for WAGP, customers and utilities – clearly benefit by the transport of higher volumes of gas through the pipeline. It is also to be noted that the owner consortium has the ability to supply increased gas volumes from Nigeria using their existing production facilities there. The constraints are the security issues in the Niger Delta (that impacts on the security of the gas infrastructure) and capacity constraints of the domestic pipeline infrastructure inside Nigeria. The Bank and WAPCo continue to engage the FGN with a view to raising these concerns and seek high level government action to resolve these constraints.

##### **Social Impacts and Mitigation**

41. Development of a livelihood restoration strategy with an appropriate M&E system. WAPCo has primarily undertaken CDPs in Year 1, which provided physical infrastructure facilities to the communities, and followed up with similar types of activities in Year 2. However, moving from this strategy towards livelihood restoration in the coming years has become a challenge for WAPCo. It is equally important to have a strong M&E system with active community participation as an integral part of the CDP follow up. Since WAPCo may not have sufficient capacity and resources, it is critical that the Bank continues intensive supervision on this aspect of social impact mitigation, including provision of technical advice.

42. Sustainability of completed CDPs. To address the inadequate interface between WAPCo and the local government in ensuring the sustainability of completed CDPs, an evaluation of CDP sub-projects is ongoing. It is important that high-level intervention is made by WAPCo to ensure that local government support will continue to be forthcoming.

### **Environmental and Safety Impacts and Mitigation**

43. Environmental audit and regulation. Power plants in Ghana, Benin and Togo are being constructed on the assumption that fuel supplies (gas) would soon be available. This is a positive development and is being induced by the implementation of WAGP project. However, because the 80 MW power plant in Cotonou, 100 MW IPP plant in Lome, and a number of IPPs in Tema are not considered associated projects with WAGP, their environmental impacts will be managed under national environmental regulation in each of the three countries.

44. Enforcement of no-anchor zone in Benin, Togo and Ghana. The WAGP pipeline has suffered damage in the past on account of unauthorized anchoring by a ship near Cotonou. Port authorities and Navy in the three countries are now engaged in enforcement of no-anchor zone. WAPCo is providing some support to the authorities in the short-term; however, it recognizes the need for long-term institutional strengthening and budget support to avoid any potential mishap to the pipeline system. See para 29 for more details.

45. Associated Gas (AG) and Non Associated Gas (NAG) data. The data on associated and non-associated gas in Nigeria (producer-wise) is available with the Department of Petroleum Resources (DPR), which can provide useful indications on the reduction of gas flaring. The aggregate has been included in the latest mission Aide-memoire.

### **Conclusion**

46. The Project has made significant progress and many of the activities in MAP are completed. As the issues involved are complex and several areas of implementation, including the supply of gas, continue to be challenging, Management recognizes that maintaining strong supervision, close monitoring, and high level dialogue are critical. Since the project is expected to be fully operational in first quarter CY2011, Management proposes reporting back to the Executive Directors for one final time by December 2011.