|  |  |  |
| --- | --- | --- |
|  |  |  |
| 2014 |
| Project Implementation Review (PIR) |
| of |

**PIMS 4221**

**Less burnt for a clean Earth: Minimization of dioxin emission from open burning sources in Nigeria**

**Table of Contents**

[A. Basic Project and Finance Data](#_Toc252634155)

[B. Project Summary](#_Toc252634156)

[C. Project Evaluation](#_Toc252634157)

[D. Adjustments](#_Toc252634158)

[E. Progress toward Development Objective](#_Toc252634159)

[F. Progress in Implementation](#_Toc252634160)

[G. Ratings and Comments on Project Progress](#_Toc252634161)

[H. Communications and Knowledge Management](#_Toc252634162)

[I. Partnerships](#_Toc252634163)

[J. Progress toward Gender Equality](#_Toc252634164)

[K. Environmental \ Social Grievances](#_Toc252634165)

[L. Project Contacts and Links](#_Toc252634166)

[M. Annex 1 - Ratings Definitions](#_Toc252634167)

# A. Basic Project and Finance Data

|  |  |
| --- | --- |
| Executing Agency: | UNDP (Nigeria) |
| GEF Focal Area: | POPS |
| Country(ies) | (NIR) Nigeria |
| Project Start Date: | 30-Jul-2010 |
| Planned Project Closing Date: | 29-Jul-2015 |
| Revised Planned Closing Date: | 29-Jul-2015 |
| Dates of Project Steering Committee/Board meetings during reporting period: | December 2013 |
| Overall Risk rating |  |
| Overall DO rating |  |
| Overall IP rating |  |
| GEF grant amount disbursed so far | $ 2,787,642.72 |

# B. Project Summary

# C. Project Evaluation

The key findings from the MTR shows that most of the targets have been achieved even before the set target dates. But one of the pilot states have been a bit behind on implementation solely on a political reason. However, the issue has been resolved and the pilot in the state would be completed before the end of the project.

No TE has been done. This has been scheduled for 2015

# D. Adjustments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Project Planning | | | | |
| **Key project milestone** | **Status** | **Original Planned Date (Month/Year)** | **Actual or Expected Date (Month/Year)** | **Comments, including reasons for delays and their implications** |
| **Inception Workshop** | **delayed/completed** | **- 2010** | **May - 2011** | **The project management unit was constituted in April 2011** |
| Mid-term Review | delayed/completed | - 2012 | 6 - 2013 | Due to the delays in the start of the project, it made sense to complete the MTE in 2013 rather than in 2012 in order to draw more meaningful lessons |
| Terminal Evaluation | delayed/pending | July - 2014 | April - 2015 | The project has been extended until July 2015. Therefore, the TE will only be conducted three months prior to the operational closure of the project. |

|  |  |
| --- | --- |
| Critical Risk Management | |
| Critical Risks Type(s) | 2014 |
| Organizational | The States are facing challenges in generating the necessary data for the calculation of UPOPs emission from open burning of waste. The project is therefore proposing to hold a national training workshop for the States on data collection and calculation of UPOPs emission from open burning of municipal waste. The training will be facilitated by an international expert early February 2015,so that this target could be achieved before the end of project. |
| Other | Seecurity risk in Kano remained high and thus a potential threat to the implementation of the project, however all precautions have been taken, in consultation with local authorities. Implementing activities in this difficult situation is quite a remarkable achievement. |

General comments:

# E. Progress toward Development Objective

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Description** | **Description of Indicator** | **Baseline Level** | **Target Level at end of project** | **Level at 30 June 2009** | **Level at 30 June 2010** | **Level at 30 June 2011** | **Level at 30 June 2012** | **Level at 30 June 2013** | **Level at 30 June 2014** |
| Reducing releases and exposure to unintentional POPs originating from unsustainable waste operations.  Enhance human health and environmental quality by reducing releases and exposure to unintentional POPs originating from unsustainable waste operations. | # of g TEQ/annum released due to open burning of collected and uncollected municipal waste. | Onitsha:        94.9 g TEQ/a from open burning of collected waste at dumpsites.        7.12 g TEQ/a from open burning of uncollected waste. | 20% reduction in open burning of collected waste at dumpsites and 100% reduction in open burning of uncollected waste:        - 19 g TEQ/a reduction by yr 4 from collected waste burning.        - 7.12 g TEQ/a reduction by yr 4 from openburning of uncollected waste. |  |  |  | Preminary report from Onitsha Inventory shows UPOPs emission of: 164.5gTEQ/annum from open burning of collected waste; 41.06gTEQ/annum from open burning of uncollected waste. | UPOPs emission from open burning of collected waste at dumpsites is 156.57gTEQ/a and from uncollected waste is 11.89gTEQ/a.  This shows a reduction from last year figure by 4.8% i.e 7.93gTEQ/a in open burning of collected waste at dumpsites  and 71% i.e 29.17 gTEQ/a reduction in open burning of uncollected waste. This was made possible because the Anambra State Government provided centralized waste bins in all the streets in Onitsha and collected them daily for disposal at the designated dumpsites. | UPOPs emission from open burning of collected waste at dumpsites is 151.09gTEQ/a and from uncollected waste is 10.85gTEQ/a. This shows a reduction from 2012 levels by 8.15% i.e 13.41gTEQ/a in open burning of collected waste at dumpsites and 73.58% i.e 30.21gTEQ/a reduction in open burning of uncollected waste. The 2012 levels was used as a reference level because it was the emission level at the time the project commenced and the value has increased beyond the baseline level used when the project document was prepared. The emission levels were calculated using the UNEP toolkits. |
|  |  | Kano:                394.2 g TEQ/a open burning of collected waste at dumpsites.                78 g TEQ/a from open burning of uncollected waste. | 20% reduction in open burning of collected waste at dumpsites and 100% reduction in open burning of uncollected waste:                - 78.8 g reduction by yr 4 from collected waste burning.                - 78 g TEQ/a reduction by yr 4 from open burning of uncollected waste. |  |  |  | Preminary report from Kano Inventory shows UPOPs emission of : 187gTEQ/annum from open burning of collected waste; 124gTEQ/annum from open burning of uncollected waste. | UPOPs emission from open burning of collected waste at dumpsites is 182.59gTEQ/a and from uncollected waste is 47.37gTEQ/a.  This shows a reduction from last year figure of 2.4% i.e 4.41gTEQ/a in open burning of collected waste at dumpsites  and 61.8% i.e 76.63gTEQ/a reduction in open burning of uncollected waste. | UPOPs emission from open burning of collected waste at dumpsites is 94.23gTEQ/a and from uncollected waste is 19.29gTEQ/a. This shows a reduction from 2012 levels by 42.72% i.e 70.27gTEQ/a in open burning of collected waste at dumpsites and 40.87% i.e 21.77gTEQ/a reduction in open burning of uncollected waste. |
|  | Number of g I-TEQ/a UPOPs reduction calculated for coarse grain croplands where burning is reduced. | 36.978 g I-TEQ/a at project inception. | Reduced by 15% or 5.55 g I-TEQ by end of project. |  |  |  | Preminary report fron Kano Inventory shows UPOPs emission of 101g TEQ/annum for open burning of coarse grain croplands. | UPOPs emission for open burning of coarse grain cropland is 70.48gTEQ representing 30.52gTEQ or 30% reduction from the previous year. Capacity development goals highlighted by the fact that data collection and the calculation of UPOPs emission was carried out by an expert working groups comprising of trained officials from Kano State Agricultural & Rural Development Authority (KNARDA), Kano State Ministry of Environment, Kano State Refuse management and Sanitation Board, Anambra State Ministry of Environment, Anambra State Waste Management Authority and Onitsha south Local Council Area. | UPOPs emission from open burning of coarse grain cropland is 40.04gTEQ /a. This shows a reduction of 60.96gTEQ or 60.36% from 2012 level. |
|  |  |  | Note: there is a bug in the on-line system for this line, the two columns on the left of this cell.    Description of Indicator: # of states incorporating UPOPs-specific priorities into their IWM strategies.    Baseline level: Zero.    Target level: At least 5 by end of project. |  |  |  | N/A | It is planned to hold discussion and to finalize agreement with state waste management authorities, especially those that have adopted the guidance notes on UPOPs reducing IWM practices, in order to incorporate the UPOPs specific priorities into their IWM by 1st quarter of year 2014. | Five States (Ekiti,Rivers,Cross River,Kano and Anambra) have incorporated waste sorting into their waste management strategies. Kano and Anambra States have prohibited open burning of waste, burning for land clearing and dumping of waste at non-designated places. |
|  | # of states and cities adopting by-laws and guidance notes on UPOPs reducing IWM practices. | Zero | At least 5 by end of project. |  |  |  | N/A | Four States (Kano, Anambra, Ekiti and Kwara) have adopted Guidance Notes on UPOPs reducing IWM practices. | Two States (Taraba and Cross River) have adopted the guidance notes on UPOPs reducing IWM practices, bringing the total number of States to six |
|  | # of city and State staff in non-pilot areas trained in UPOPs-reducing practices. | Zero | At least 100 by end of project. |  |  |  | N/A | 25 farmers/ agricultural extension officers and 16 waste management stakeholders outside the pilot areas have been trained in UPOPs reducing practices | 70 farmers/ agricultural extension officers and 90 municipal waste management stakeholders outside the pilot States were trained in UPOPs reducing practices. The training has improved the capacity of these stakeholders to implement UPOPs reducing practices in their respetive State's waste management operations |
| Stakeholders assess and quantify baseline data on UPOPs generation from open burning of Municipal and Agricultural Waste (MAW).    Output 1:Demonstration of Inventory of UPOPs sources and releases in two pilot sites.    Output 2. Monitoring and reporting mechanisms in place and operational. | Updated MAW source inventory and UPOPs release figures from open burning of MAW.    Updated emission data on UPOPs in pilot states and by projection for the country. | Preliminary data based upon minimal fieldwork and ground checking. | More comprehensive UPOPs estimate elaborated and adopted by FMoE, incorporated into Stockholm convention report. |  |  |  | Preliminary report of the updated MAW source inventory and UPOPs release figures from open burning of MAW shows that 516.56gTEQ/a and 102.44gTEQ/a of UPOPs are released from open burning of municipal and agricultural wastes respectively from the two pilot states. | Data collection is very difficult due to budget constraints. However, the project plans to hold meeting with the state authority for possible collaboration to enable the project to have a projection for the country in 2014 | Some States have started submitting data for the calculation of the UPOPs releases from open burning of MAW but more are still expected to make a realistic projection for the country. |
|  | # of people trained with demonstrable ability to conduct inventory. | No State-level staff in Nigeria are currently trained to do this | At least 10 staff personseach in Anambra and Kano States and test scores above 80%. |  |  |  | 50 people from relevant stakeholders' institutions in the two pilot states and at federal level were trained in the use of UNEP toolkit for the identification and quantification of dioxin emissions from open burning of municipal and agricultural waste. The trainees all demonstrated ability to conduct inventory | Trainees provided the UPOPs quantification data indicated in previous boxes for 2013. | Output completed as per the previous reporting period. However, it may be necessary to retrain them to update their knowledge and sustain their capacity to carry out inventory of UPOPs emission. |
|  | Online reporting format available for each state to fill in online. Interactive website tracking UPOPs reporting from different Nigerian states. | No website or reporting format. | Website with reporting formats for each participating state shows \\\\\\\"at a glance\\\\\\\" status of UPOPs for each state. |  |  |  | Website developed and hosted (www.nigeriaupops.org). The reporting formats for monitoring UPOPs emissions from the pilot states have been developed and will be available online once the report of the inventory exercise is finalized by the international UPOPs inventory/monitoring consultant. | The project is addressing some current challenges on its web site. The online reporting will be running by November 2013. | Reporting format in place. However, information/data from the pilot States are centrally uploaded into the website by a dedicated officer in the project management unit. At the end of the project, the website will be transferred to the Chemical Information Exchange Network (CIEN) website in the Federal Ministry of Environment. |
|  | # of States submitting annual reports on UPOPs from open burning. | No reporting mechanism; not states reporting. | 2 states by end of year 1. 10 states by end of year 2. 20 by end of year 3. |  |  |  | Two states (Kano and Anambra) submitted data on UPOPs emissions from open burning of MAW based on the inventory exercise | Two States (Kano and Anambra). The project is planning to assist the states that have endorsed the MAW policy with some funds to carry out an inventory of UPOPs emission in their states in 2014 subject to the approval of the project steering committee. | Six States (Kano, Anambra, Kwara, Oyo, Niger, Taraba) submitted reports. The project assisted Oyo and Kwara in undertaking a comprehensive UPOPs inventory from open burning of MAW. |
| Federal waste management policy adopted and UPOPs reduction strategy endorsed.    Output 1. National municipal and agricultural waste management policy developed.    Output 2. Federal UPOPs reduction implementation strategy. | # of state EPAs endorsing draft policy on MAW management. | No MAW management policy in place. | At least 15 state EPAs endorse policy by end of year 3. |  |  |  | N/A | 12 States comprising Niger, Benue, Abia, Kwara, Ekiti, Ondo, Nasarawa, Oyo, Kano, Anambra, Kebbi and Taraba have endorsed the National Policy on Municipal and Agricultural Waste Management. | Cross River State has endorsed the National Policy on Municipal and Agricultural Waste Management bringing to 13 the number of States that have endorsed the policy. The project team drafted the policy and facilitated its review and adoption by the States. |
|  | Legislative branch endorses MAW management policy. | No legislative branch endorsement. | Endorsement of policy by Cabinetby end of year 3. |  |  |  | N/A | The Policy is currently undergoing processing for presentation to the Federal Executive Council (FEC) by the Honourable Minister of Environment for approval. The policy covers comprehensively the management of MAW from the source of generation to disposal with provision for its implementation strategy covering: legal & regulatory framework, sustainable financial mechanism, target for integrated waste management practices etc. | The Federal Ministry of Justice vetted and endorsed the policy but due to changes in the political leadership in the Federal Ministry of Environment, the process for the presentation of the policy to the Federal Executive Council (FEC) was interrupted. The process has re-started with the present leadership. Beside the adoption by the States, the FEC has to approve the policy to become a national legal document. The memo seeking for this approval can only be presented to the council by the Honourable Minister of Environment.The project has prepared and submitted the memo to the Honourable Minister through the appropriate channel of communication for processing. |
|  | # of Federal Agencies and State EPA adopting new MAW strategy. | No federal or state-level MAW strategies in place. | FMoE endorses strategy by end of year 3. At least - State EPA? Endorse Strategy by end of year 3. |  |  |  | N/A | National UPOPs reduction strategy from open burning of municipal and agricultural waste has been developed, reviewed and endorsed by stakeholders. The strategy is specifically for the reduction of UPOPs emission from open burning of MAW and can be implemented in the absence of policy approval. | 4 States (Kano, Anambra, Kwara, Taraba) adopted the national UPOPs reduction strategy |
|  | Draft and final versions of policy developed and reviewed in timely manner. | No policy developed or in place. | Policy draft completed by end of year 1. Stakeholder review completed by end of year 2.        Submitted to legislative branch by beginning of year 3 of project. |  |  |  | Completed draft national policy on municipal and agricultural waste management with specific UPOPs reduction strategies. The draft is scheduled for stakeholders' review from 28-30 August 2012. Preparation for the review workshop has been concluded. | Draft National Policy on Municipal and Agricultural Waste Management has been developed, reviewed and adopted by Stakeholders. The Policy is now being processed for presentation to the Federal Executive Council (FEC) by the Honourable Minister of Environment for approval. | Policy being processed for Federal Executive Council approval. On approval National Regulations will be developed for its implementation by the National Environmental Standards and Regulation Enforcement Agency (NESREA). |
|  | # of people on national committee for waste management trained in MAW UPOPs issues &amp; frequency of committee meetings/year. | No people trained on MAW UPOPs source and release issues.        Committee does not meet regularly. | Every member of committee trained by end of year 2.        Meeting 2x year by end of year 2. |  |  |  | Three members of the national committee for waste management were part of the trainees at the training on the use of UNEP toolkit for the identification and quantification of dioxin from open burning of municipal and agricultural waste and on municipal waste sorting, material recovery and composting process. | Two additional members of the committee were trained on alternative approaches to open burning of agricultural waste. All members of the committee have now been trained. | Output completed as per the previous reporting period with respect to training. However, the frequency of the meetings of the committee is beyond the control of the project as they are convened by the Federal Ministry of Environment as need arises. |
|  |  |  | - |  |  |  |  |  |  |
| Technical by-laws and guidance adopted by pilot state EPA.    Output 1. Technical by-laws, state and municipal guidance covering UPOPs reductions in waste management developed. | City council by-laws drafted, reviewed and gazetted in timely manner. | No existing by-laws or regulations | By-laws drafted by end of year 1.    By-laws adopted by end of year 2. |  |  |  | N/A | The by-laws have not been drafted because of the initial absence of policy and guidance note on waste management covering UPOPs issues to base it on. However, with the development of these pre-requisite documents by the project, arrangement has been concluded for the inauguration of the by-laws drafting committees in the two pilot states by July 2013. | By-laws drafted, reviewed and adopted by stakeholders in the two pilot States. Their titles are Kano State Refuse Management and Sanitation Board (Amendment) Law 2014 adopted on 27th March 2014 and Anambra State Waste Management Authority (Restriction on open burning of agricultural and municipal waste) Regulations 2014 adopted on 3rd April 2014. |
|  | Guidance notes drafted and adopted in timely manner. | No guidance notes. | Guidance drafted by end of year 1.    Guidance adopted by end of year 2. |  |  |  | N/A | Guidance Notes on UPOPs reduction in waste management have been developed, reviewed and adopted by stakeholders. | Output completed as per the previous reporting period. The guidance notes were distributed to the States and are available on the project website. |
|  |  |  | - |  |  |  |  |  |  |
|  |  |  | by-laws developed |  |  |  |  |  |  |
| Federal and state municipal waste policy setting and enforcement capacity increased.    Output 1. Strengthened capacity in UPOPs minimizing MAW management practice. | # of judicial and state environmental protection officials in pilot sites with measurably improved knowledge and skills. | No training in UPOPs minimizing management practice or enforcement of existing environmental pollution laws. | 20 officials in each pilot state have completed training and have measurably improved knowledge and skills. |  |  |  | N/A | This activity was delayed for the finalization of the national UPOPs reduction strategy, guidance notes and the by-laws for a comprehensive assessment of training needs. Activity will commence in August 2013 | The training has been scheduled for October 2014 |
|  | % of main actors in waste creation, storage, transportation and dumping who are familiar with IWM and UPOPs reduction principles. | Approximately 5-10%. Baseline in two pilot sites to be measured at project inception. | 60-75% by end of the project. |  |  |  | N/A | 40% of major stakeholders in waste management in the pilot states are now familiar with IWM and UPOPs reduction principles | With the training of over 600 scavengers, private waste collectors and officials of the waste management authorities in the pilot states, more than 50% of waste operators in the pilot states are now familiar with IWM and UPOPs reduction principles. |
|  | Training needs assessment    Training workshops on enforcement, UPOPs reducing waste management practice. | No training needs assessment, workshops or materials made available to officials at state level. | Training needs assessment completed by EoY 1.    Training programme 50% completed by EoY 2 and 100% completed by EoY 3. |  |  |  | N/A | Training needs assessment is ongoing | Training needs assessment has been completed and the implementation of training has commenced with the training on best practices in municipal waste management for UPOPs reduction. Two more training for enforcement officers and the private waste management sectors are on track for completion by end of the project. |
|  |  |  | - |  |  |  |  |  |  |
| UPOPs emissions reduced through improved sorting of municipal waste.    Output 1. Introduction of waste separation at selected communities. | Volume increase in waste sorted prior to depositing in dumpsite. | 0 tonnes/year.                                                                Waste is largely not sorted and is dumped in site where burning is the norm. | At least 50% of waste tonnage collected in each pilot site is sorted for priority non-recyclable materials in each pilot city by end of project. |  |  |  | Secured two communities in the pilot states (Kabuga-Jambolo in Kano and Fegge in Onitsha) for the establishment of community based waste sorting and composting programme. The construction of a compost plant is ongoing in Kano and distribution of branded waste sorting receptacles to households will commence in September 2012 when the compost plant is completed.We have challenges of land for the construction of compost plant in Onitsha but hopeful to overcome it soon | Established a community-based waste sorting at household level and collection programme in Kabuga-Jambolo, Kano. The project distributed three colour-coded waste bins to 250 households in the community for the sorting of their waste into compostable (Green Bin), recyclable (Blue Bin) and others (Brown Bin). This has resulted in the sorting of about 70% of waste collected in the community. This programme will be replicated in Onitsha by August 2013 as the State Governor has promised to provide the project with land for establishment of a composting facility before July 2013 ending.  Also as a result of the awareness of the economic values of recyclable materials,the level of sorting without burning has increased at the designated dump sites in the two pilot states. | The project has just established a community based waste sorting and collection programme at the household level in Ezinifite-Okpuno, Awka (This community replaces Onitsha because of challenges of available land for the compost plant) and provided three colour-coded waste bins for 560 households in the community for the sorting of their waste into compostable (Green Bin), recyclable (Blue Bin) and others (Brown Bin). When the programme fully takes off, it will result in the sorting of about 80% of waste collected in the community. As a result of the training of scavengers in the pilot States on effective sorting methodology, the economic values of properly sorted recyclable materials and the danger of dumpsite burning, the level of waste sorting has increased in the pilot States while burning of dumpsite has decreased. |
|  | Specific incremental steps taken to strengthen baseline IWM strategies with UPOPs-specific priorities and practices (BAT/BEP) | No UPOPs-specific elements included in baseline IWM strategies. | Onitsa and Kano strategies revised/strengthened w/respect to UPOPs release reductions and formalized sorting goals and milestones. |  |  |  | N/A | The provisions of the national UPOPs reduction strategy and guidance notes on reducing open burning of MAW will be integrated into the IWM strategies. | UPOPs reducing practices such as waste sorting, dumping at designated site and prohibition of open burning of waste have been incorporated into the IWM strategies of the pilot States. |
|  | # of dumpsites upgraded to reduce/prevent burning;                        # of hectares of upgraded dumpsite land where burning is impossible. | Zero                        Zero | At least 10 by end of project. Upgrading of designated dump site in the 8 LGA of Kano and the 2 LGA of Onitsha by year 2 of project. At least 70 hectares by end of project. |  |  |  | N/A | The project is currently upgrading one of the major dumpsites (hectares of landfill upgrade: 30) in Kano to a simple landfill site where burning will not be possible. That of Onitsha will start in August 2013. | The project completed the Upgrading of the Kano dumpsite (30 hectares) and has commenced the Upgrading of the Amachara dumpsite, Awka (5 hectares) to a controlled dumpsite. The upgrading work involved perimeter fencing and gating of the dumpsites to prevent unauthorised entry, installation of weighbridge, demarcation of the site into dumping cells, waste sorting bays and drainage and leacheat control channels. |
|  | Number of residential estate and commercial plazas and institutions that sign on the separation programme in pilot states | No formal waste separation programme | 10% of residential estates, commercial and government institutions in pilot states with separation programmein place by year 1 of project |  |  |  | 300 household units have signed into the waste sorting and composting programme in each of the dedicated communities in the two pilot states. | 250 households, markets around the pilot community and 15 restaurants are participating in the programme in Kano. This was not done yet in Onitsha because the state government has not yet provided land for the construction of a compost plant to treat the organic waste that would have been separated from the sorting programme. | 560 households, 2 major markets, 2 hotels and 10 restaurants are participating in the waste sorting programme in Awka. This is in addition to the results achieved last year. |
|  | Level of increase in community awareness. | Baseline TBD at project inception through local surveys. | Community level awareness of UPOPs in Kano and Onitsha cities increased 30% by year 2. |  |  |  | The level of public awareness on environmental, occupational health and safety issues of UPOPs and the contribution of open burning of municipal and agricultural waste to UPOPs emissions has risen significantly through a series of aggressive public awareness campaigns carried out by a non-governmental organisation, the Centre for Education and Leadership Development, Kano. | From the project\'s various activities and awareness raising programme, the level of community awareness of UPOPs in Kano has risen by 40% while that of Onitsha by 20%. This has been estimated through sample interviews of stakeholders. | As a result of the project various training and awareness programmes, sorting/composting programme and collaboration with relevant waste management authorities in the pilot States, the community level awareness of UPOPs and its reduction practices has increased to about 45%. This was assessed through random interactions with members of the communities. These trainings included awareness training on detrimental effects of dumpsite burning and effective waste sorting methodology for scavengers, on 25-28 November and 4-5 December 2013. Community sensitization of Okpuno community's leaders and youth association on waste burning and UPOPs, waste sorting and composting through a Non Governmental Organisation - Environmental and Health Conservation Organisation - 20-21June 2014. |
|  | Number of State EPA, Waste management authority and community \\\"block leaders\\\" trained in waste sorting. | No EPA, WMA or block leaders identified or trained. | At least 10 EPA and WMA staff trained in each pilot; At least 20 community leaders in each pilot LGA. |  |  |  | 60 key stakeholders comprising waste management organisations (public & private), ministries of environment and community leaders from the pilot states were trained on municipal waste sorting, material recovery and composting process. | Output completed as per the previous reporting period. |  |
|  | # of key stakeholders trained in \\\"train the trainer programme on UPOPs reduction sorting\\\". | Stakeholders not assessed or formally recognized or trained. | Citywide train the trainer activities cover 25% of key stakeholders in IWM (state/local government, civil societies, media, private investors). |  |  |  | N/A | 11 stakeholders were trained as train the trainer on UPOPs reduction sorting and composting. The project intent to train 40 stakeholders in IWM, thus the 11 stakeholders trained represents 27.5% of the total stakeholders to be trained. | The project has trained more than 100 stakeholders as trainer of others in UPOPs reducing practices. This is above the initial number proposed in the previous year (40 stakeholders). Those trained will use the training manual developed to train others. |
|  | Citywide targets for sorting. % of city offices participating in programme to sort materials not a priority for recycling. | No targets, no milestones to measure success.  None of the city offices or departments within pilot cities participating. | Targets in place as part of approved citywide IWM Strategy by end of project's first 18 months. At least 5 participating by EoY 2; 10 by EoY 3; and 20 by EoY 4. |  |  |  | N/A | The target is that every major office in the pilot states participate in sorting their waste prior to disposal. Effort is being made to start this in the state ministries of environment and waste management authorities. | The Ministry of environment and the waste management agencies in the pilot states have started sorting their waste right from their offices. The National Orientation Agency in collaboration with relevant national stakeholders has also started an aggressive nationwide sensitization of the public on behavioural change waste sorting at the point of generation. |
|  |  |  | - |  |  |  |  |  |  |
| UPOPs emissions reduced through improved composting.    Output 1. Establishment of composting programme and collection of compostable waste at communities in 2 pilot cities.    Output 2. Develop market for composted matter in pilot areas.    Output 3. Five States participating in federal IMSWM programme replicate best practices. | Presence/absence of basic infrastructure for composting (collection,composting,bagging | None present | collection and composting infrastructure in place by end of year 1. Bagging of compost underway end of year 3. |  |  |  | N/A | N/A | The project has established a compost plant (3 bins system) with necessary waste processing machinery at Ezinifite-Okpuno community, Awka and have in place two tri-cycle vans for house to house collection of compostable waste. Test running of the plant for compost production using the community's waste will start end of July 2014. |
|  |  |  | Note: there is a bug in the on-line system for this line, the two columns on the left of this cell.    Description of Indicator: # of states incorporating UPOPs-specific priorities into their IWM strategies.    Baseline level: Zero.    Target level: At least 5 by end of project. |  |  |  | N/A | 4 states comprising the two pilot states, Kwara and Ekiti states adopted the guidance notes on UPOPs reducing IWM practices. It is planned to hold discussion and to finalize agreement with state waste management authorities, especially those that have adopted the guidance notes on UPOPs reducing IWM practices, in order to incorporate the UPOPs specific priorities into their IWM by 1st quarter of year 2014. |  |
|  | # of city and State staff in non-pilot areas trained in UPOPs-reducing practices. | Zero | At least 100 by end of project. |  |  |  | N/A | Training in UPOPs reducing practices for both pilot and some non-pilot states will commence by August 2013 | 70 farmers /agricultural extension officers and 90 municipal waste management stakeholders from non-pilot States have been trained in UPOPs reducing practices. |
|  | # of BAT-BEP for UPOPs reduction developed and circulated for replication. | No BAT-BEP developed in Nigeria for UPOPs. | At least 5 by end of project. |  |  |  | N/A | 2 developed | 6 BAT-BEP developed for UPOPs reduction from MAW. These are Shredding of crop residues into animal feeds; Urea treatment of crop stalks for livestock feeding; Improved tillage, slash &amp; mulch and cover cropping systems; Waste sorting, recycling and composting processes; Principles and concepts of agroforestry as a means of reducing open burning of agricultural waste; National guldance notes for the reduction of UPOPs from open burning of waste. |
|  | # of neighbourhoods with active sorting and composting programmes in the metropolitan local government areas of pilot states. | 0 neighborhoods participating in sorting or composting. | Sorting and composting programmes in 8 local government areas (LGA) of Kano &amp;2 LGA of Onitshaby end of year 4. |  |  |  | One neighbourhood (Kabuga-Jambolo in Kano) will commence active sorting and composting programmes by October 2012. | Active sorting and composting programme is going on in Kabuga-Jambolo, Kano, and the Kano State Government has made budgetary allocation for the replication of the programme in seven (7) Local Government Council in the State. The project will commence the same in Onitsha by August 2013.    Sorting and composting activities are also being carried out at the following communities (i) IIokun and Erinfun/Emirin Ado-Ekiti, Ekiti State and Rumuokpolu (ii) Eliozu, Port-Harcourt, Rivers State. | Active sorting is about to commence in Okpuno community, Awka, Anambra State. The project may not be able to provide receptacles to other communities for sorting but will liaise with the waste management authorities in the pilot States on how to improvise. |
|  | Presence/absence of basic infrastructure for composting (collection, composting, bagging). | None present | Collection and composting infrastructure in place by end of year 1.    Bagging of compost underway end of year 3. |  |  |  | Construction of a community-based composting plant is on-going in Kano and branded waste receptacles are being produced for distribution to households to facilitate collection of sorted waste. | At Duraiyi quarters, Kabuga-Jambolo, Kano, coded waste bins for source sorting of waste was given to householders and waste collection system using the community\'s youth was established. A compost plant (Windro system)/plastic shredder was also established in the community,which is currently producing an average of 3.7 tonnes of compost per month from the community\'s waste. The compost are bagged as 5Kg and 10Kg. | The project has established a compost plant (3 bins system) with necessary waste processing machinery at Ezinifite-Okpuno community, Awka and have in place two tri-cycle vans for house to house collection of compostable waste. Test running of the plant for compost production using the community's waste will start end of July 2014. |
|  | # of restaurants participating in composting programme. | Zero. | At least 10 by EoY 2; 20 by EoY 3, and 40 by EoY 4. |  |  |  | 4 restaurants will be participating in the sorting/composting programme by September 2012. | 15 restaurants are participating in the composting programme in Kano | 2 major markets, 10 restaurants and 2 hotels have shown interest in participating in the waste sorting and composting programme in Awka. |
|  | Volume of compost sold to commercial buyers. | Zero. | At least 2 tonnes per quarter sold by end of project. |  |  |  | N/A | 800 kg of compost is being sold quarterly to farmers and horticulturists, effort is being made to expand the market and quantity of compost sold through more awareness outreached on the benefits of using the compost. | In order to expand the quantity of compost being sold, the project is about to finalise discussion with Kano State horticulture Institute and Ministry of Agriculture for mass purchase of the compost. The Kano plant is currently producing 12 tonnes of compost per quarter while the Awka plant will be producing 15 tonnes per quarter. |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Open burning of stubble on farm fields is reduced through changes in agricultural practices.    Output 1. Clarification and elaboration of UPOPs challenges in the agricultural sector with a focus on Kano state.    Output 2. Increased level of farmer and agriculture officials awareness of the impact of burning farm fields, both from an agronomic and UPOPs perspective.    Output 3. Alternative approaches to stubble burning at pilot sites in Kano introduced and replicated. | # of hectares in which alternative approaches to agricultural waste (AW) burning at 2 pilot-sites in Kano state have been introduced by farmers. | Zero hectares. | By the end of the project, alternatives have been introduced in each pilot area of Kano: 20 ha at Danbatta, and 20 ha at Dogwa. |  |  |  | Acquired 20 ha of farm land each at Shiburu village, Doguwa and Dambatta respectively, for the pilot demonstration of alternative approaches to open burning of agricultural waste. Activities at these sites will commence from September 2012. | In Danbatta 100 farmers are currently not burning their farmland covering 120ha in preparation for planting season while in Dogwa 75 farmers are also practicing the same on 165ha farmland. | In addition to last year's figure, 90 ha of farmland were cultivated without burning while the number of farmers participating in the non-burning of farm land has increased to 787. These farmers convert their crops residues into animal feeds, use them for mulching materials and practice improved tillage, crop rotation and cover cropping on their farms. |
|  | Number of hectares of farmland burned in a year. | Hectares of cropland stubble burned/year. (Baseline TBD at project inception. ) | At least 10 farmers not burning cropland in preparation for farming.        Hectares/year burned |  |  |  | Number of hectares of cropland stubble burned in one year in Kano state estimated at 406,653 Hectares. | The total number of hectares of cropland stubble burned is 243,560ha. This shows an improvement of 40% over the previous year. | 787 farmers did not burn their cropland in preparation for farming. The total hectares of cropland stubble burnt is 109,680.0 ha. This is a reduction of 73.01% from 2012 level. The cropland burnt was calculated as the total hectares within the cultivated land where crop residues were gathered together and burnt instead of the previous practice of setting the whole cultivated land on fire. The collection of data and calculations were done by the trained officers from Kano State Agriculture and Rural Development Authority (KNARDA), FADAMA111Project and the Project's Agricultural Consultant. |
|  | UPOPs agricultural (ag) burning data refined for Kano State;        Respective area of lands per crop determined. | No refined data. | Supportive data refined by end of year 1;        UPOPs from ag burning clarified and specified by end of year 2. |  |  |  | From the preliminary inventory report, area of lands per crop burnt are: Sorghum-153,041ha; Millet-108,342ha; Maize-30,157ha; Rice-30,308ha; Cowpea-84,803ha and Sugarcane-420ha. | The total area of land per crop burnt are Sorghum-104,007ha (reduction of 32.04% from previous year); Millet-26,960ha (reduction of 75.12% from previous year); Maize-30,895.5ha (increase of 2.45% from previous year ); Rice-21,697.5ha (reduction of 28.41% from previous year );Sugarcane-60,000ha (which will be used as baseline). | The total area of land per crop burnt are Sorghum-62,404.2 ha (reduction of 59.22% from 2012 level); Millet-16,176 ha (reduction of 85.07% from 2012 level); Maize-14,417.9 ha (reduction of 52.19% from 2012 level); Rice-11,282.7 ha (reduction of 62.77% from 2012 level); Sugarcane-5,400 ha (reduction of 10% from last year level. Last year figure was actually 6,000 ha and not 60,000 ha as reported, a typographical error in last year's report). |
|  | % of awareness among clearly defined target groups of farmers and agriculture officials. | Awareness level TBD at project inception. Few farmers are aware of UPOPs releases through burning of agricultural land. | Increase of at least 50% by end of project. |  |  |  | Public/farmers' sensitisation on the detrimental effect of open burning of agricultural waste and UPOPs emissions and effect on human and animal health commenced through D/welle Germany Radio (Hausa section). A comprehensive awareness programme to be anchored by an NGO is planned for October 2012. | Carried out public awareness and sensitization campaigns in farming communities and among farmers of the impact of burning on farm fields and UPOPs problems / alternative approaches to open burning of agricultural wastes through a Non-Governmental Organization.  Farmers\' awareness level on alternative use of their crop residues rather than burning has increased significantly to about 35% from the various training and awareness programmes undertaken by the project. | Farmers awareness of the negative impact of UPOPs emission from open burning of agricultural land and the economic benefit of utilizing agricultural waste for animal feeds, mulching and compost material has increased significantly. Another indication of awareness is the number of farmers purchasing personal crop shredding machine for the conversion of waste to animal feed, 10 shredding machines have been purchased by individual farmers. A total of 858 MT of crop residues, which in previous years would have been burnt, were instead converted to animal feed. Also, farmer groups are also in discussion with micro-finance institutions, to obtain support to purchase this machine. Kano State Institute of Livestock training and Entrepreneurship, which has also acquired its own shredding machine, feeds its cattles and goats with shredded crop residues. |
|  | # of training workshops organized for extension officers and farmers.                #extension toolkit and # training manuals developed for extension officers and farmers | Innovative approaches to burning not known. | At least 8 workshops held by project end for extension officers/farmers. |  |  |  | A training module has been developed and currently being reviewed for final production by August 2012. A training workshop is planned to be held in September 2012 for extension officers and farmers on alternatives to open burning of agricultural waste and the advantages of such alternatives i.e. elimination/reduction of UPOP emissions, pest control, soil fertility, weed control etc. | Carried out 3 training/ demonstration workshops for stakeholders comprising practicing farmers, agricultural extension workers and others on (i) implication of farmland burning on soil fertility, human health and alternative methods to open burning (ii) use and maintenance of crop shredder for the shredding of crop residues into animal feeds/ mulching/compost material;(iii) the use of crop residues for mulching to increase soil fertility and moisture, reduce soil temperature and control weeds and replicated in 4 additional farms. Established one shredding centre each in the 2 pilot sites with motorized shredding machines which are being used by farmers to shred their crop residues either at the centre or on their farms. More than 85 tonnes of crop residues have been shredded in the two pilot sites.The positive impact of these trainings has resulted in the purchase of 5 crop shredders by three farmers for personal use on their farms to produce feed for their livestock (Goat and Cow). | The project has trained a total of 453 people in five training/demonstration workshops for stakeholders comprising practicing farmers and agricultural extension workers on the use of cover cropping to reduce weeds; crop rotation as a means of reducing farm pest; principles and application of agro-forestry as a means of reducing agricultural waste burning; increasing agricultural waste sorting and management strategies; and peer to peer review on alternative approaches to open burning. All these training modules have been compiled into a training manual. |
|  | # of additional farms replicating alternative approaches to burning. | Zero | Alternatives replicated for at least 20 additional farms across Kano. |  |  |  | N/A | Alternatives have been replicated in 6 farms outside the pilot areas in Kura and Wudil Local Government Areas of Kano State covering 80ha of farmland. | The various alternatives introduced by the project were replicated in more than 50 farms across eight Local Government Areas of Kano State (Makoda, Kunchi, Bichi, Falgore, T/Wada, Bebeji, Kiru and Riruwai). 4 shredding machines were purchased by individual farmers outside the pilot States. |
|  |  |  | - |  |  |  |  |  |  |

# F. Progress in Implementation

|  |  |
| --- | --- |
| Outcome 1 | Stakeholders assess and quantify baseline data on UPOPs generation from open burning of Municipal and Agricultural Waste (MAW).    Output 1:Demonstration of Inventory of UPOPs sources and releases in two pilot sites.    Output 2. Monitoring and reporting mechanisms in place and operational. |
| Outputs Reported 1.Trained 50 stakeholders from the pilot States to monitor the emission of UPOPs from open burning of municipal waste in their States and report the outcome to the project.  2.Two non-pilot States (Oyo and Kwara) were assisted by the project to assess and quantify UPOPs emission from MAW in their States. In total six States (Kano, Anambra, Kwara, Oyo, Niger, Taraba) submitted UPOPs report. More States are still expected to contribute to prepare realistic UPOPs projections for the country.  3.Website with UPOPs reporting formats, for each participating State, in place | |
| Outcome 2 | Federal waste management policy adopted and UPOPs reduction strategy endorsed.    Output 1. National municipal and agricultural waste management policy developed.    Output 2. Federal UPOPs reduction implementation strategy. |
| Outputs Reported 1. National policy on municipal and agricultural waste management endorsed by 13 States.  2. National policy on municipal and agricultural waste management is still being processed for Federal Executive Council approval. Delay was due to changes in the political leadership of the Federal Ministry of Environment.  3. Four States (Kano, Anambra, Kwara, Taraba) adopted the national UPOPs reduction strategy from MAW.  4. Sorting of waste prior to disposal, prohibition of open burning of waste and dumping of waste at non-designated places have been incorporated into the IWM strategies of Kano and Anambra States.  5. Two States (Taraba and Cross River) have adopted the guidance notes on UPOPs reducing IWM practices, bringing the total number of States to 6. | |
| Outcome 3 | Technical by-laws and guidance adopted by pilot state EPA.    Output 1. Technical by-laws, state and municipal guidance covering UPOPs reductions in waste management developed. |
| Outputs Reported By-laws covering UPOPs reductions in waste management in the two pilot States were updated, reviewed and adopted by stakeholders. The by-laws are Kano State Refuse Management and Sanitation Board (Amendment) Law 2014 adopted on 27th March 2014 and Anambra State Waste Management Authority (Restriction on open burning of agricultural and municipal waste) Regulations 2014 adopted on 3rd April 2014 | |
| Outcome 4 | Federal and state municipal waste policy setting and enforcement capacity increased.    Output 1. Strengthened capacity in UPOPs minimizing MAW management practice. |
| Outputs Reported 1. Training needs assessment has been competed in September 2013 and the implementation of training has commenced. The recommended training to bridge the gaps identified covers system designed for storage of waste at source, its primary collection, secondary storage, transportation, treatment and disposal in an environmentally acceptable manner, public-private parnership in IWM, legal framework for IWM in Nigeria and roles and procedures for enforcement of rules for municipal waste management officials, law enforcement officials, elected representatives and the private sector.    2. During this reporting period approximately 790 stakeholders from governmental institutions, non-governmental organisations, private sector, informal waste collectors (scavengers), etc were trained on best practices in municipal waste management for UPOPs reduction in both pilot and non-pilot States, consisting of : training of over 600 waste scavengers in the pilot States, on IWM and UPOPs reduction principles;100 trainers of trainers on UPOPs reducing practices; 90 relevant stakeholders in two non-pilot States have been trained in UPOPs reducing practices. | |
| Outcome 5 | UPOPs emissions reduced through improved sorting of municipal waste.    Output 1. Introduction of waste separation at selected communities. |
| Outputs Reported 1) Onitsha: UPOPs emission from open burning of collected waste at dumpsites showed a reduction from 2012 levels by 8.15% (i.e 13.41gTEQ/a) and a 73.58% (i.e 30.21gTEQ/a) reduction in the open burning of uncollected waste.  2) Kano: UPOPs emission from open burning of collected waste at dumpsites showed a reduction from 2012 levels by 42.72% (i.e 70.27gTEQ/a) and a 40.87% (i.e 21.77gTEQ/a) reduction in the open burning of uncollected waste.  3) Community based waste sorting at the point of waste's generation was established in Okpuno community, Awka. Three colour-coded waste receptacles (Green for compostable waste, Blue for recyclable waste and Brown for other waste type) were provided, covering 560 households in the community for the sorting of their waste. Two major markets, ten restaurants and two hotels are also participating in the programme.  4) The sorting programme at Kabuga-Janbolo, Kano is going on actively.  5) The project completed the upgrading of a 30 hectares dumpsite in Kano and has commenced the upgrading of a 5 hectares Amachara dumpsite, Awka into a controlled dumpsite. The upgrading work includes: perimeter fencing and gating of the dumpsite to prevent unauthorised entry, installation of weighbridge, demarcation of the site into dumping cells, waste sorting bays and drainage/leacheat control channels.  6) The Ministry of Environment and the waste management agencies in the pilot States have started sorting their waste from their offices.  7) The National Orientation Agency in collaboration with relevant stakeholders is currently carrying out a nationwide awareness campaign on waste sorting from source of generation and encouraging the populace to embrace the use of the colour-coded bins. | |
| Outcome 6 | UPOPs emissions reduced through improved composting.    Output 1. Establishment of composting programme and collection of compostable waste at communities in 2 pilot cities.    Output 2. Develop market for composted matter in pilot areas.    Output 3. Five States participating in federal IMSWM programme replicate best practices. |
| Outputs Reported 1) A community-based waste composting plant was established with waste processing machinery at Ezinifite-Okpuno community, Awka, Anambra State for the production of 15 tonnes of compost per quarter from the community's waste. A compostable and recyclable waste collection system was put in placed through the provision of tri-cycle van for effective collection. The plant will beging operation by the end of July 2014.  2) The composting facility established at Duraiyi quarters,Kabuga-Jambolo,Kano continues to produce more compost than is being sold.Therefore, the project is about to finalize discussions with Kano State Horticulture Institute and the Ministry of Agriculture for bulk purchase of the 12 tonnes of compost produced quarterly at the plant. | |
| Outcome 7 | Open burning of stubble on farm fields is reduced through changes in agricultural practices.    Output 1. Clarification and elaboration of UPOPs challenges in the agricultural sector with a focus on Kano state.    Output 2. Increased level of farmer and agriculture officials awareness of the impact of burning farm fields, both from an agronomic and UPOPs perspective.    Output 3. Alternative approaches to stubble burning at pilot sites in Kano introduced and replicated. |
| Outputs Reported 1) 5 training/demonstration workshops were organised for 353 stakeholders (made up of 283 from the pilot State and 70 from non-pilot States) comprising of practicing farmers and agricultural extension workers on BEP to avoid crop residues burning.  2) The level of awareness of farmers and agricultural extension officers on the impact of burning farm fields and utilization of crop residues as animal feeds has increased significantly.  3) During this reporting period, an additional 90 ha of farmland were cultivated without burning (as compared to last year's reporting period) while the number of farmers participating in the non-burning of farmland has increased to 787.10 crop shredding machines were bought by farmers and 858 MT crop waste was shredded in stead of burned and used as animal feed.  4) The alternative non-burn practices introduced and practiced by farmers are: the conversion of crop residues into animal feed and mulching materials to increase soil fertility, crop rotation to reduce farm pest and cover cropping to reduce weeds.  5) Alternative approaches to open burning of agricultural waste introduced to the farmers were replicated in more than 50 farms across eight Local Government Areas of Kano State (Makoda, Kunchi, Bichi, Falgore, T/Wada, Bebeji, Kiru and Riruwai). Four shredding machines were purchased by individual farmers outside the pilot States. | |

General comments:

# G. Ratings and Comments on Project Progress

|  |  |
| --- | --- |
| Progress toward Development Objectives | |
| Project Manager/Coordinator | Satisfactory |
| The project is meeting its developmental objectives, their is an aggregate of 25% reduction in UPOPs emission from open burning of collected waste at dumpsite and 57% reduction from uncollected waste in the two pilot States. In the agricultural sector, a reduction of 60% of UPOPs emission from open burning of agricultural residues has been achieved.  The project has opened the eyes of the population to the utilization of crop residues and waste recycling as a means of empowerment scheme and serve as source of income, hence, further reduction of UPOPs emission would be achieved before the end of the project | |
| UNDP Country Office Programme Officer | Satisfactory |
| In spite of challenges arising from rising insecurities around the region of implementation the project is well on track with meeting all its development targets as evidenced in the well-earned political / financial commitments of the two Governors of the states where the project is currently ongoing. This has significant implication of scalability and replication of its successes. | |
| Project Implementing Partner |  |
|  | |
| GEF Operational Focal point | Satisfactory |
| The project is achieving its developmental objectives. It has met most of its planned outcomes and is yielding global environmental benefits. All necessary stakeholders were involved during the implementation of the project and this has sustained stakeholders interest in the project. This will further aids the project in meeting its developmental objectives beyond the project life cycle. | |
| Other Partners |  |
|  | |
| UNDP Technical Advisor | Satisfactory |
| The main development outcomes of the projects are the following:  - Outcome 1.1 Stakeholders assess and quantify baseline data on current and projected releases of UPOPs from open burning of municipal and agricultural waste (MAW).  In this regard, it is very likely that the DO will be achieved well on time thanks to the project. The appropriate support has been provided to stakeholders, particularly local authorities. What will need to be insisted on in the last phases of the project is to make sure that the appropriate mechanisms are in place for the sustainability beyond the end of the project.  - Outcome 1.2 Federal waste management policy adopted and UPOPs Reduction Strategy Endorsed.  The project did all the necessary to advance the process as much as it had power to in this regard, waiting now for political-level vetting - and it did so while ensuring appropriate consultation of key stakeholders. The DO will be achieved in this case. Capacity was built within the steering committee on this topic. 13 states (out of a target of 15) have now adopted the National Policy on Municipal and Agricultural Waste Management and 4 states adopted the national UPOPs reduction strategy (the target was 2).  - Outcome 1.3. Technical by-laws and guidance adopted by pilot state EPA.  This DO is already achieved and quality guidance notes have been developed, which can be used as resources in other states in Nigeria and potentially neighboring countries with similar conditions as well.  - Outcome 1.4. Federal and state municipal waste policy setting and enforcement capacity increased.  Although this DO is not achieved yet as further training remains needed, all conditions are met for it to be the case by project completion. The project has made all necessary efforts to include key stakeholders for waste management, such as scavengers, local officials and private sector.  - Outcome 2.1. UPOPs emissions reduced Through Improved Sorting of Municipal Waste  This will not be fully met – this has been mostly the case due to a delayed start and general implementation in one of the two pilot states; and the difficulty to mobilise the co-financing that was envisaged at the start of this project. Although dump site upgrades will not meet the number of sites (10) and the area (70 hectares) that were indicated as target, partial achievement will be completed by the end of the project. Additionally, quality outreach and training have been conducted, thus paving the way for replication in other sites – especially as political support has now been strengthened in the two pilot states. If not attained by the end of the project, it can this be hoped that they will be within 2-3 years after project completion, through replication of the activities. The green economy dimension of this part of the project is noticeable as scavengers but also private businesses (hotels, restaurants,…) have been engaged in the process showing the economic benefits of improved infrastructure and practices.  - Outcome 2.2. UPOPs emissions reduced by improved composting.  The objective will be met as two composting facilities will be established; once again the efforts have been well structured at the sites and it is likely that a very positive outreach will come from it. The economic dimension is also to be praised as efforts to demonstrate the economic viability of compost (selling the compost in particular, in cooperation with an horticulture institute) have been regularly sustained and offer good hope of replication/sustainability beyond the project.  - Outcome 2.3. UPOPs emissions reduced through improved incremental management of dump sites to suppress/prevent burning.  This is on-track for completion as per the above point (Outcome 2.2).  - Outcome 2.4: Five States Participating in Federal-State-Private Sector IMSWMP replicate demonstrated best practices for UPOPs reductions.  4 states comprising the two pilot states adopted the guidance notes on UPOPs reducing IWM practices for replication purposes, so the target of 5 states can reasonably be hoped to be attained by end of the project.  - Outcome 3.1. Open burning of agricultural waste is reduced through changes in agricultural practices.  This is probably the most remarkable achievement of the project. Targets have been met through quality capacity building and surpassed in many regards – number of farmers involved and committed, surface of land with changed practices. The following of these practices at the local level has been furthered by word of mouth and the demonstration of results in terms of improved yields. Here, the benefits of improved practices to reduce UPOPs emissions have also led to improved agricultural production. Farmers are purchasing now their own devices considering the positive results observed. While 40 hectares represented the target for improved practices, close to 400 hectares are now concerned; 10 farmers were expected to commit to new practices, and more than 700 have done so, resulting in documented reduction in UPOPs emissions presented in this report.  Overall, the Development objective progress has been outstanding and in some components would deserve a highly satisfactory rating. However, because of the difficulty of mobilizing co-financing in particular, some other quantitative targets will not be achieved (regarding the upgrade of dump sites) – although the quality of the results gives good hope for positive replication in the future. | |

General Comments

|  |  |
| --- | --- |
| Progress in Implementation | |
| Project Manager/Coordinator | Satisfactory |
| The project was implemented in accordance with the approved workplan and besides the bureaucratic bottle-neck encountered,which were beyond the control of the project management unit, the timeline for project activities and outcomes were met.  The project's activities will be completed before the of the project, except the establishment of additional waste sorting and composting programmes in 8 Local Government Areas and the upgrading of additional 8 dumpsites. This may not be feasibled, in view of the cost implication of these activities and the challenges of land allocation by pilot States. | |
| UNDP Country Office Programme Officer | Satisfactory |
| As far as the project document is concerned, implementation trend to date does not indicate any foreseeable delay or overruns of planned activities. Except in cases where expansion of activities might be demand driven, which would be a case of building on the planned foundational activities. | |
| Project Implementing Partner |  |
|  | |
| GEF Operational Focal point | Satisfactory |
| The project was implemented in accordance with the workplan and difficulties were addressed promply. The project would be able to complete its activities before its terminal date. | |
| Other Partners |  |
|  | |
| UNDP Technical Adviser | Satisfactory |
| In this implementation year, the project management was able to resolve one major implementation bottleneck, which was constituted by the lack of political support in one of the two pilot states – which had led to postponement of activities in that state, due to lack of availability of land. This was creating a threat that part of the activities would have to be altogether cancelled. Through strong involvement of all committee members (including at political level), and also by motivation of the representatives of that state within that committee, it was possible to overcome this barrier to implementation. The promising development of activities following this in Anambra state, related to dumpsite upgrade and composting demonstration, is very promising.  In general, the project faces difficulties in finding insurances that the sustainability of the capacity built on UPOPs inventory will be maintained. However, this has been identified by the project team and they are working to put in place as much as possible the conditions for this post-project sustainability. In certain sectors such as the burning of agricultural waste, the success of the demonstration seems to have created a dynamics of its on which has spread throughout and around the region of demonstration.  While in the agricultural sector, the targets at the start of the project may have been set too low – considering the results eventually achieved – the ones in the reduction of burning and increased sorting of municipal waste may have been set a bit too high – considering its reliance on political support (need to get the dumpsites identified, land granted…) and financial resources of co-financing. The project has had more difficulties identifying this sufficient co-financing for relatively heavy investment.  There are excellent outputs such as best practices documents and, overall, the results of the project need to be appropriately outreached in the final stretch up to the closure of the project in 2015 – including for replication in other countries. This has only be partially done up to now and an upgrade of this communication effort will be undertaken in the next reporting cycle. | |

General Comments

# H. Communications and Knowledge Management

|  |
| --- |
| The Story of This Project |
| The project aims at reducing releases and exposure to Unintentional Persistent Organic Pollutants (UPOPs) arising from open burning of municipal and agricultural waste. The project therefore addresses the major reasons why people burn their waste and introduces them to alternative approaches to open burning of waste through training and practical demonstration of these alternatives. The main project beneficiaries are the two pilot States, Kano and Anambra.    The project developed a National policy on Municipal and Agricultural Waste Management which has been endorsed by 13 States and is being processed for presentation to the Federal Executive Council for approval. The waste management by-laws in the two pilot States were updated with provisions for UPOPs reduction practices, reviewed and adopted by stakeholders in the States.The by-laws are Kano State Refuse Management and Sanitation Board (Amendment) Law 2014 adopted on 27th March 2014 and Anambra State Waste Management Authority (Restriction on open burning of agricultural and municipal waste) Regulations 2014 adopted on 3rd April 2014.    During this reporting period, a total of 1,143 people from government institutions, non-governmental organisations, private sector, scavengers, farmers and agricultural extension officers were trained on best available techniques /best environmental practices in municipal and agricultural waste management for the reduction of UPOPs emission.    in Anambra State, a community- based waste sorting, collection and composting programme has been established in Okpuno community, Awka. Three colour-coded waste sorting receptacles (Green for compostable waste, Blue for recyclable waste and Brown for other wastes) were provided for 560 households for the sorting of their waste at the point of generation. The project collects the recyclable and compostable waste to the compost plant for processing into organic fertilizer and plastic crumbs which are then sold to farmers/horticulturists and industries for soil replenishment and recycling respectively, thus waste which would have been burnt and would emit UPOPs is converted into useful products and generate income instead.    In Kano, in addition to shredding machines provided by the project, farmers purchased 10 more machines and shredded 858 MT of crop residues for use as animal feed instead of burning them. This practice was replicated in 8 other areas outside the pilot areas.    The project upgraded an aggregate of 35 ha of dumpsites into controlled dumpsites for the reduction of open burning of municipal waste in the two pilot States as well as updated their waste management's by-laws with UPOPs reduction provisions.    The project achieved an aggregate reduction of 25% and 57% in UPOPs emission from open burning of collected and uncollected waste respectively in the two pilot States while a reduction of 60% was attained in UPOPs emission from open burning of agricultural waste.    As a result of the economic viability of the project, microfinance institutions are discussing with farmers on how to partner with them to acquire more machines while the Nigeria Infrastructural Advisory Facility has shown interest in the replication of the composting facility. |
| Adaptive Management this Reporting Period |
| The major challenge are the delays encountered in Anambra State in allocating land for the project's waste composting programme. It was approved by the former Governor of the State, who could not complete the process before the expiration of his tenure in office. However, the problem was resolved by a visit of the project management unit and a member of the project steering committee representing Anambra State. |
| Lessons Learned |
| 1)Effective communication (formal and traditional means) of project objectives, planned activities and the benefits with the relevant stakeholders contributed immensely to the acceptability of the project by stakeholders.  2)To ensure that project implementation starts smoothly and prevent delays /non-achievement of project deliverables, project beneficiary status should only be confirmed on any States that make available the requisite in-kind contribution prior to the conclusion of the project document.  3)Project's deliverables and targets should be limited to activities fully funded by the project and supported by beneficiary States and not based on assumption that other states will buy in into the project. Most non-beneficiary States are very reluctant in providing support for project's activities in their states, with their fund. |

General Comments

# I. Partnerships

|  |  |
| --- | --- |
| Partners | Innovation and Work with Partners |
| Civil Society Organisations/NGOs | The project worked with Environmental and Health Conservation Organisation in raising community's awareness on the problems of open burning of waste and UPOPs, the use of colour-coded waste bins for waste sorting at source of generation and composting and recycling activities. |
| Indigenous Peoples |  |
| Private Sector | St John hotels and suite, Okpuno and other privately owned restaurants are collaborating with the project in the waste sorting and composting programme while a number of individual farmers e.g Alhaji Abbas Mustapha Falaki have purchased their own crop shredders. |
| GEF Small Grants Programme |  |
| Other Partners | The project is working with microfinance institutions such as All non banking micro financial institute (ANMFI), Kano to support individual and farmers' group with funds to purchase their own crop shredder. |

General Comments

# J. Progress toward Gender Equality

|  |  |
| --- | --- |
| Findings of gender/social needs assessment |  |
| Changes in targeting women/girls |  |
| Additional information on the project's work on gender equality | Women were actively involved in all the programme organised by the project, about 60 women out of 790 participants have been trained on UPOPs -reducing practices. This number would have been higher but for the religious and cultural limitations operating at the pilot states. However, during the house to house sensitization on waste sorting and the use of waste sorting bins, women were the primary target. A gender assessment has been planned and included in this year's project budget and should be complete in the next reporting period of the PIR. |

General Comments

# K. Environmental \ Social Grievances

|  |  |
| --- | --- |
| Related environmental or social issue |  |
| Status |  |
| Significance |  |
| Detailed description |  |

# L. Project Contacts and Links

|  |  |  |
| --- | --- | --- |
| Partner | Contact Name | Email Address |
| Project Coordinator / Manager | Mr. Idi M. Maleh | idimmaleh@yahoo.com |
| UNDP Country Office Programme Officer | Oladipo Osibo | oladipo.osibo@undp.org |
| Project Implementing Partner | Federal Ministry of Environment/Department of Pollution | idimmaleh@yahoo.com |
| GEF Operational Focal Point | Mrs. Halima K. Mohammed | halmohammedus2000@yahoo.com |
| Other Partners |  |  |
| UNDP Technical Adviser | Saliou Toure | saliou.toure@undp.org |

|  |  |
| --- | --- |
| Project website, etc. | www.upops.org.ng |
| Links to media coverage |  |

# M. Annex 1 - Ratings Definitions

**Implementation Progress Ratings Definitions**

*Highly Satisfactory (HS):* Implementation of all components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as 'good practice'.

*Satisfactory (S):* Implementation of most components is in substantial compliance with the original/formally revised plan except for only few that are subject to remedial action.

*Moderately Satisfactory (MS):* Implementation of some components is in substantial compliance with the original/formally revised plan with some components requiring remedial action.

*Moderately Unsatisfactory (MU):* Implementation of some components is not in substantial compliance with the original/formally revised plan with most components requiring remedial action.

*Unsatisfactory (U):* Implementation of most components is not in substantial compliance with the original/formally revised plan.

*Highly Unsatisfactory (HU):* Implementation of none of the components is in substantial compliance with the original/formally revised plan.

**Development Objective Progress Ratings Definitions**

*Highly Satisfactory (HS):*  Project is expected to achieve or exceed all its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as 'good practice'.

*Satisfactory (S):* Project is expected to achieve most of its major global environmental objectives, and yield satisfactory global environmental benefits, with only minor shortcomings.

*Moderately Satisfactory (MS):* Project is expected to achieve most of its major relevant objectives but with either significant shortcomings or modest overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environment benefits.

*Moderately Unsatisfactory (MU):* Project is expected to achieve of its major global environmental objectives with major shortcomings or is expected to achieve only some of its major global environmental objectives.

*Unsatisfactory (U):* Project is expected not to achieve most of its major global environment objectives or to yield any satisfactory global environmental benefits.

*Highly Unsatisfactory (HU):* The project has failed to achieve, and is not expected to achieve, any of its major global environment objectives with no worthwhile benefits.