



Report Number : ICRR0020567

1. Project Data

Country

Morocco

Practice Area(Lead)

Social, Urban, Rural and Resilience Global Practice

Programmatic DPL
Planned Operations: 2

Approved Operations: 2

Operation ID

P127955

Operation Name

MA-Solid Waste Sector DPL3

L/C/TF Number(s)

IBRD-82300

Closing Date (Original)

31-Dec-2013

Total Financing (USD)

130,000,000.00

Bank Approval Date

14-Feb-2013

Closing Date (Actual)

31-Dec-2013

IBRD/IDA (USD)
Co-financing (USD)

Original Commitment

130,000,000.00

0.00

Revised Commitment

130,000,000.00

0.00

Actual

129,838,425.00

0.00

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IEGSD (Unit 4)

Operation ID

P148642

Operation Name

MA-Solid Waste Sector DPL4 (P148642)



L/C/TF Number(s) IBRD-82300,IBRD-84670	Closing Date (Original) 31-Dec-2015	Total Financing (USD) 130,000,000.00
Bank Approval Date 12-Feb-2015	Closing Date (Actual) 31-Dec-2015	
	IBRD/IDA (USD)	Co-financing (USD)
Original Commitment	130,000,000.00	0.00
Revised Commitment	130,000,000.00	0.00
Actual	116,041,285.67	0.00

2. Program Objectives and Policy Areas

a. Objectives

The development objective of this second programmatic series (DPL 3 and 4) is to support the Government's efforts to improve the economic, environmental, and social performance of the Municipal Solid Waste sector. This formulation of the objective is found in both Program Documents for the two DPLs, in report no 74639-MA of Feb 5th, 2013 on page 30, para 76, and in report no 91846-MA of Jan 15th 2015, on page 12 para 30. There are no formulations of the programs' objectives in the Legal Agreements.

b. Pillars/Policy Areas

Prior Actions: The ICR specified 18 Prior Actions and Triggers (grouped by Policy Area, pp.5-7) that were completed before the DPL was submitted to the Board. (There was one exception, a Prior Action that was not completed at the mutual agreement of the parties, as explained in para 21, p.8 of the ICR.)

The Programs (DPL 3 and DPL 4) had four Policy Areas:

Policy Area A: Governance of Municipal Solid Waste Sector

Policy Area A focused on the demand/side governance in the MSW sector by (a) promoting access to information; (b) fostering greater transparency; and (c) improving accountability of service through providers to citizens.

Government actions and activities included

- Piloting Citizens' Report Cards on Municipal Solid Waste services
- Implementing Citizens' right to access environmental information
- Broadened Public Access to Private Sector Participation contracts
- ensuring effective monitoring and benchmarking of Municipal Solid Waste service performance

Policy Area B: Institutional and Financial Sustainability of Municipal Solid Waste Management Service



This Policy Area focused on (a) improving Integrated Solid Waste Management through the professionalization of Municipal Solid Waste systems in harmony with the decentralization agenda; (b) securing funding to cover the costs of Municipal Solid Waste services and ensure financial sustainability; and (c) consolidating market competitiveness for Municipal Solid Waste service delivery by mitigating the risk related to private sector participation in contract management. Policy Area B aimed at improving the operational performance of the sector, the financial capacity of Local Governments to sustain the Municipal Solid Waste services, and the improved environment for private sector participation. Government actions and activities included:

On Institutional Sustainability:

- Establishment of the "Organic Law" to reconfirm that municipalities are fully responsible for Integrated Solid Waste Management
- Introduction of inter-municipal/regional public asset companies to enable professionalization of planning and developing Municipal Solid Waste infrastructure and managing Municipal Solid Waste service delivery through Private Sector Participation contracts
- Establishment of a national program to support Local Governments with intergovernmental institution/building for the first pilots of metropolitan districts and inter-municipal arrangements

On Financial Sustainability:

- Establish a reform of municipal finance including eco/taxes and a dedicated Municipal Solid Waste fee
- Support municipalities to better mobilize municipal fiscal potential
- Improve and consolidate market competitiveness for Municipal Solid Waste service delivery

Policy Area C: Environmental Monitoring and Control

Policy Area C focused on:

- Upgrading of environmental monitoring and control system
- Training and appointment of environmental inspectors
- Modernizing the management and improving the performance of the Environmental Impact Assessment System

Policy Area D: Development of Recycling Value Chains

Government actions and activities included:

- use of eco/tax system to finance the development of recycling value chain
- establishment of value chain for plastic and other products
- use of eco/tax system to finance social program for integration of informal waste/pickers into the recycling sector

c. Comments on Program Cost, Financing, and Dates



Program Cost:

For DPL3, the Original Total Commitment was US\$ 130 million and the Actual Disbursed Amount was US\$ 129.84 million.

For DPL4, the Original Total Commitment was US\$ 130 million and the Actual Disbursed Amount was US\$ 116.04 million.

The discrepancies between total commitment and actual disbursement are due to the Commitment Fee and currency fluctuations as the Loan Agreements were signed in Euro (information provided by the Team).

Financing:

The program was financed through two Development Policy Loans and had no co-financiers.

Dates:

DPL3 (P127955) was appraised on 12/03/2012, approved on 02/14/2013, effective on 06/13/2013 and the funds were disbursed on 06/13/2013. The project was closed on the original closing date; 12/31/2013.

DPL4 (P148642) was appraised on 11/25/2014, approved on 02/12/2015, effective on 06/25/2015 and the funds were disbursed on 05/25/2015. The project was closed on the original closing date; 12/31/2015.

3. Relevance of Objectives & Design

a. Relevance of Objectives

The operation's objectives were highly relevant to Morocco's development priorities as reflected in the National Municipal Solid Waste Program (PNDM) at both appraisal and closure. The PNDM, launched by the Government of Morocco in 2008 was a three-phase, 15-year national program supporting municipalities with reforms and interventions to modernize the municipal solid waste sector. The first phase of the PNDM (2008-12) was supported by the first two Development Policy Loans in this series (DPL 1 and 2), with DPL 3 and 4 supporting the PNDM's second phase (2013-17). The Objectives were also fully aligned with the CPS for the period FY2010-13, supporting its second and third pillars of service delivery to citizens and sustainable development in a changing climate in addition to supporting the crosscutting theme of governance. The Objectives were still highly relevant in the CPS for FY2014-17, supporting results area 3; Strengthening governance and institutions for improved service delivery to all citizens through its innovative use of Citizens' Report Cards to improve access to and quality of service delivery. The whole Programmatic Series was also relevant to the World Bank Group's strategic goals of ending extreme poverty and promoting shared prosperity in a sustainable manner. The supported policies were designed to create job opportunities for informal waste pickers through the establishment of recycling value chains, and to control and mitigate adverse environmental impacts of existing dump sites to improve the residing populations living conditions, most of whom are marginalized and poor.

Rating

High



b. Relevance of Design

Relevance of Design is rated Substantial. The four policy areas (a. strengthening governance of the municipal solid waste sector; b improving institutional and financial sustainability of municipal solid waste sector; c. upgrading the country's environmental monitoring and control system; and d. developing recycling value chains) were necessary and sufficient to achieve the program's objectives (Support the Government's efforts to improve the economic, environmental and social performance of the Municipal Solid Waste sector). **Policy areas B and D** (improve financial revenues of municipalities, decrease arrears due to private operators and increase eco-tax revenues) contributed to improving the **economic** performance of the sector. **Policy Areas A and C** (improve environmental monitoring and control) contributed directly to improving the **environmental** performance of the sector. **Policy Area A and D** (engaging citizens through feedback, ensuring that 20 percent of eco-tax revenues were allocated to support waste pickers' recycling activities, and generating income opportunities in recycling) contributed to improve the **social** performance of the sector. **Policy Area A** (improve governance, access to information, and transparency in the use of public money) contributed indirectly to **all three objectives** in the PDO.

Relevant indicators were identified to measure the relative achievement of improved economic performance, improved environmental performance and improved social performance. The statement of the objectives is clear and clearly linked to the expected outcomes (as described in the policy areas), and the causal chain between funding and outcomes is clear and convincing. Furthermore, the choice of Lending Instrument, a series of DPL, proved to be highly relevant to the current context where the Government of Morocco committed to a long-term plan for reforming and restructuring the Municipal Solid Waste Sector.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

To support the Government's efforts to improve the economic performance of the Municipal Solid Waste sector.

Rationale

Objective 1 was substantially achieved, as demonstrated through the achievement of related indicators for output and intermediate outcome levels:

Output level:

Relevant indicators	Baseline	DPL3 Target	DPL4 Target	Achieved
2. % of contracts signed with extract disclosed on Local Government's website	0	100	<input type="checkbox"/>	100



4. Number of inter-municipal/regional institutions established	7	15	<input type="checkbox"/>	25
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Intermediate Outcome level:

Relevant indicators	Baseline	DPL3 Target	DPL4 Target	Achieved
5. % increase in aggregated municipal revenues	0	10	20	19.4
6. decrease in the % of volume of arrears compared to total amount of contracts	70	50	30	20
8. Total amount of eco-taxes collected and allocated to the National Environmental Fund	0	MAD 230 million	<input type="checkbox"/>	MAD 409 million
10. Number of income generating opportunities in the recycling sector for waste pickers	150 (20 women)	1,000	500	1,050 (50 women)

Comments on the indicators:

4: The establishment of inter-municipal and regional institutions contributed to additional economies of scale.

10: The objective was to create job opportunities. The 18 recycling projects that were approved at project closure were estimated to generate 1,050 job opportunities for waste pickers. It was estimated that 5 % of the waste pickers were women.

Objective 1 was substantially achieved, as all targets were achieved or exceeded.

The Policy Matrix (Table 3) on pp 5-7 in the ICRs shows that all Prior Actions under all four policy areas were completed for all three objectives.

Rating

Substantial

Objective 2

Objective

To support the Government's efforts to improve the environmental performance of the Municipal Solid Waste sector.

Rationale

Objective 2 was substantially achieved, as demonstrated through the achievement of related indicators at output and intermediate outcome levels:

Output level:

Relevant indicators	Baseline	DPL3 Target	DPL4 Target	Achieved
7. % of MSW sanitary landfills regularly inspected	8	100	<input type="checkbox"/>	100

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Intermediate Outcome Level:



Relevant indicators	Baseline	DPL3 Target	DPL4 Target	Achieved
3. % of MSW collected professionally and disposed of in sanitary landfills	32	66	55	53
9. Number of recycling projects supported through eco-tax revenues	0	10	<input type="checkbox"/>	18

Comments on the indicators:

3: 22 landfills were operational in Morocco at the time of the ICR, receiving about 2.9 million tons of waste (53 % of collected MSW); this included the recently completed landfills of Marrakech, Meknes and Ouarzazate. Once the five sanitary landfills that were currently under construction (Khenifra, Tanger, Beni Mellal, Sefrou, and Casablanca) were completed, the rate was expected to reach 80%.

7: All sanitary landfills under operation in 2014/15 were inspected by the Ministry of Environment.

9: At the time of the ICR, 18 projects had been approved. 15 of those had been approved between municipality, Ministry of Interior, and MOE and all conventions had been signed. Three projects had been approved with local community groups (e.g. cooperatives), and were in the process of having conventions signed.

Objective 2 was substantially achieved, as one target was very nearly achieved, one was achieved and one was exceeded.

The Policy Matrix (Table 3) on pp 5-7 in the ICRs shows that all Prior Actions under all four policy areas were completed for all three objectives.

Rating

Substantial

Objective 3

Objective

To support the Government's efforts to improve the social performance of the Municipal Solid Waste sector.

Rationale

Objective 3 was substantially achieved, as demonstrated through the achievement of the related indicators, all of which are at Intermediate Outcome level:

Relevant indicators	Baseline	DPL3 Target	DPL4 Target	Achieved
1. Number of municipalities implementing Citizen's Report Cards on MSW services	0	4	5	5
9. Number of recycling projects supported through eco-tax revenues	0	10	<input type="checkbox"/>	18



10. Number of income generating opportunities in the recycling sector for waste pickers	150 (20 women)	1,000	500	1,050 (50 women)
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Comments on the indicators:

9: At the time of the ICR, 18 projects had been approved. 15 of those had been approved between municipality, Ministry of Interior, and MOE and all conventions had been signed. Three projects had been approved with local community groups (e.g. cooperatives), and were in the process of having conventions signed.

10: The objective is to create job opportunities. The 18 recycling projects that were approved at project closure were estimated to have generated 1,050 job opportunities for waste pickers. It is estimated that 5 % of the waste pickers were women.

Objective 3 was substantially achieved as all targets were either achieved or exceeded.

The Policy Matrix (Table 3) on pp 5-7 in the ICRs shows that all Prior Actions under all four policy areas were completed for all three objectives.

Rating

Substantial

5. Outcome

The overall Outcome is rated Satisfactory as Relevance of Objective were high both at appraisal and closure, Relevance of Design was Substantial, and all three Objectives were substantially achieved.

a. Outcome Rating

Satisfactory

6. Rationale for Risk to Development Outcome Rating

The overall risk that the development outcomes from this operation will not be maintained is considered to be Modest.

Political Risk: The political risk is considered to be low, as the Government of Morocco showed dedication and commitment to the implementation of the two first phases of the PNDM through continued financial priorities and policy reforms. The Government of. It was considered likely that the GoM would keep pursuing its long-term entering into the third phase of the PNDM (2018-2022).

Technical Risk: The risks to technical implementation is considered to be Modest, as the decentralization to



Local Governments and their contracting of the private sector included both collection and disposal operations. Service coverage rates were high and the risk that coverage ratios would drop is low since the private sector operators had long-term contracts; collection services were generally 7-year-contracts and disposal services were generally 15-20 year contracts. Some of the disposal contracts had multiyear extensions.

Risk of stakeholder opposition to recycling reforms: This risk is considered to be Modest to Negligible as it was successfully mitigated by including the informal sector; job opportunities were created for informal waste pickers in the recycling sector. This was reinforced by providing a new source of income from eco-tax revenues. The shift from an informal waste picker to a formal employee was quickly accepted by the Local Governments, and a solid pipeline of recycling projects was achieved.

Risk of private sector opposition to new eco-tax: This risk is considered Modest, as the eco-tax was initially set at 2.5 % and was applied on plastic raw materials and plastic products, but not on imported products containing plastic. This raised concerns among industrialists in Morocco who saw the application of the eco tax as unfair favoring import products. After rounds of consultations with the MOE, the tax was believed likely to be reduced by 1 percent and extended to imported plastic products in the 2017 Budget Law to make it more equitable.

a. Risk to Development Outcome Rating

Modest

7. Assessment of Bank Performance

a. Quality-at-Entry

The World Bank's Quality-at-Entry performance was satisfactory during loan preparation and appraisal of both DPL 3 and 4. The decision to enter into a second programmatic series was guided by the lessons presented in the first ICR and allowed for further reforms in the Municipal Solid Waste sector. The indicators were fine-tuned and WB staff assisted in facilitating improved communications between the government ministries and between the ministries and the local governments. During the preparation of DPL4, WB staff was proactive in supporting Policy Area D: the development of recycling value chains. The WB brought in specialized technical expertise and facilitated dialogue with the private sector and informal waste pickers to facilitate smooth implementation of the program. The Strategic Relevance and Approach of the DPL was appropriate to the context as were the implementation arrangements. Monitoring and Evaluation Arrangements were adequate and very well aligned with the Borrower's ME& system, and the Risk Assessment was accurate.

Quality-at-Entry Rating

Satisfactory

b. Quality of supervision

The DPL program was supervised by task teams of technical and institutional specialists in the Bank. While the expert team was varied and specialized, the program benefited from continuity in World Bank support as the same Task Team Leader led the process from preparation of DPL1 through to supervision of DPL4. Six supervision missions were carried out during implementation in addition to one carried out by



videoconference. Implementation progress was followed closely by the various Bank experts. The Bank team alerted the Government on delays to achieve some of the results indicators for percentage of waste collected and disposed of in sanitary landfills, number of municipalities implementing Citizen's Report Cards (CRC) and environmental control and inspection of the MSW landfills. This careful supervision not only helped the program stay on track but it also built a strong relationship between the client and the WB. The quality of supervision is rated Satisfactory.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Satisfactory

8. Assessment of Borrower Performance

a. Government Performance

The Government of Morocco has showed dedication and commitment to achieving the objectives of the second programmatic series. The Government established a National Commission for its National Municipal Solid Waste Program (CN-PNDM) dedicated to coordinate all waste policies and investments, and to monitor results indicators. The Government undertook extensive consultations with stakeholders and civil society prior to implementation of the second phase of the PNDM, which contributed to mitigating the risks associated with the introduction of the Citizens' Report Cards and the eco-tax on the private sector. The Government's commitment to provide financial support and improve the revenues of Local Governments contributed to successful implementation. There were some minor shortcomings in the speed of construction, completion and operation of new sanitary landfills, which was mainly due to lengthy procedures in securing environmental and social approvals, in procurement procedures and land acquisition and in construction, especially when these tasks were decentralized to the municipal level. However, the Government continued to provide financial support for investments in key elements under both DPLs and resolved most implementation issues on time. The relationship and coordination with the World Bank were considered to be excellent throughout.

Government Performance Rating

Satisfactory

b. Implementing Agency Performance

The "implementing agency" was indistinguishable from the Government. The rating therefore corresponds with the rating for Government performance, as there was no separate implementing agency. The implementing agencies included the Ministry of Economy and Finance, the Ministry of Interior and the Ministry of Environment, along with Local Governments. Policy actions were implemented by several ministries under the supervision of the National Commission for PNDM. The Government established a National Commission for its National Municipal Solid Waste Program (CN-PNDM) dedicated to coordinate



all waste policies and investments, and to monitor results indicators. There were some minor shortcomings in the speed of construction, completion and operation of new sanitary landfills, which was mainly due to lengthy procedures in securing environmental and social approvals, in procurement procedures and land acquisition and in construction, especially when these tasks were decentralized to the municipal level. The Government undertook extensive consultations with stakeholders and civil society prior to implementation of the second phase of the PNDM, which contributed to mitigating the risks associated with the introduction of the Citizens' Report Cards and the eco-tax on the private sector.

Implementing Agency Performance Rating

Satisfactory

Overall Borrower Performance Rating

Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The M&E Design was adequate and appropriate for the program design. The M&E framework was well aligned to key outcomes expected from the overall government program (the PNDM). The M&E Framework remained almost identical between DPL 3 and 4. Minor clarifications were introduced with the DPL 4 and the targets of 4 of the 10 indicators were adjusted upwards to reflect the program's progress and early achievements. The targets of 2 indicators were adjusted down to take into account implementation delays.

The Objectives were clearly specified and the selected indicators reflect the objectives to a large extent. All indicators were measurable in terms of numbers and timing. The M&E data collection activities were well-embedded within the Government's own institutions. The results framework of the second programmatic series was closely linked to the PNDM indicators. Regular meetings of the National Commission of PNDM enabled good oversight of the implementation progress.

b. M&E Implementation

There is scarce information in the ICR regarding M&E implementation. However, appropriate adjustments were made to the indicators and targets at the start-up of the DPL4, and the agency responsible for the M&E functioned effectively in that data was collected and disseminated at regular meetings. The M&E system should be sustained as it was entirely embedded in the Government's own structures, measuring the progress and achievements of the Government's own program.

According to the project team (meeting March 2nd, 2017), the PNDM produced regular progress reports. The PNDM collected all relevant data from the different ministries and other government bodies. The program's progress reports were distributed to stakeholders and submitted to the WB; most of the indicators were reported on in the progress report, since there was compliance between the PNDM indicators and the DPLs' indicators. Progress data related to CRCs were collected directly by the Bank during supervision missions.



c. M&E Utilization

M&E findings were communicated to relevant stakeholders, and partly made available on the Government's website. M&E data were used actively by the World Bank team to alert the Government on delays in reporting some of the results indicators for percentage of waste collected and disposed of in sanitary landfills, number of municipalities implementing CRCs and environmental control and inspection of the MSW landfills. This helped the program stay on track.

M&E Quality Rating

Substantial

10. Other Issues

a. Environmental and Social Effects

The supported reform including the retained prior actions of DPL 3 and 4 were expected to have significant positive impacts on the environment, forests and natural resources. No supported prior action has had significant adverse effect on the environment, forests and natural resources. (PD for DPL3 page 50, para 127, and PD for DPL 4 page 31 para 112).

It is likely that the program has had a positive effect both environmentally and socially; in that Municipal Solid Waste collection and disposal became more effective and efficient, the waste was increasingly dumped in sanitary landfills, and that informal waste pickers were offered formal job opportunities in the recycling sector, and that citizens' report cards were introduced.

b. Fiduciary Compliance

Disbursements were made on achievements on prior actions, as for all DPLs. It was only when these actions were completed that the project went to the Board, and the full amount was disbursed upon approval of the project. The funds were budgetary support to the Ministry of Finance, so there were no procurement or fiduciary compliance issues.

c. Unintended impacts (Positive or Negative)

The development of recycling value chains beyond plastic is an unintended positive effect of the program. Lessons from establishing the plastic value chain were used to establish other value chains in the Moroccan economy, such as batteries, oils, electronic waste, used tires, paper, etc. These value chains were at different stages of development.



d. Other

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	---
Risk to Development Outcome	Modest	Modest	---
Bank Performance	Satisfactory	Satisfactory	---
Borrower Performance	Satisfactory	Satisfactory	---
Quality of ICR		Substantial	---

Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

12. Lessons

The Lessons are derived from the ICR document with some modification of language.

1 . Sector reform takes time: reforms should start simple and gradually get more complex. There is a greater chance to succeed with more complex reforms if tangible results from simpler reforms are present first.

2 . Focusing on improving 'systems' rather than just 'training' is more effective in achieving long-term results. Capacity building and training should be designed to improve the performance of a 'system' and not only of individual skills.

3 . World Bank-supported reforms should be totally aligned with Government priorities for greater success.

4 . In the right context, the use of Development Policy Lending in sector reforms can be a very effective instrument. The DPL instrument can offer analysis, a reform planning framework, implementation support, and convening power by the World Bank while maintaining full government leadership and ownership of the reforms themselves.

5 . Providing Local Governments with responsibility over the entire Municipal Solid Waste chain at the local level is a key lesson for success. Responsibilities for collection and disposal of solid waste are often fragmented across several administrative boundaries. Lessons suggest greater success when responsibility of the entire system at the local level (collection, street cleaning, disposal, recycling, etc.) is concentrated under one entity.



13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR is well written, clear and concise. The quality of evidence presented is adequate and the analysis is clear. The Lessons are based on evidence and analysis and the ICR is results-oriented. The ICR is furthermore internally consistent and in consistency with the OPCS guidelines.

a. Quality of ICR Rating

Substantial