



Improvement of waste collection and treatment in Mascara, Mostaganem, and Sidi Bel Abbès, Algeria

Implementation of a cooperation project "Support for Integrated Waste Management" (Appui à la Gestion Intégrée des Déchets - AGID) in the Wilayas of Mascara, Mostaganem and Sidi Bel Abbès

OBJECTIVES

The main objectives were as follows:

- To introduce separate collection.
- To build on the achievements of a previous project in Mascara.
- To develop peer-to-peer learning, including among Algerian actors.
- To focus on "bottom-up" operations.

BACKGROUND INFORMATION AND LOCATION

General information on the territory:

- Location: Mascara, Mostaganem and Sidi Bel Abbès
- Country: Algeria
- Population: Mascara (123,162), Mostaganem (158,443) and Sidi Bel Abbès (233,771)
- Density: 18,73 inh./km²

General information on waste management in Algeria:

Integrated waste management remains a major challenge in Algeria:

- 13.5 million tonnes of waste are produced each year by 42 million inhabitants
- Most household waste ends up in landfills, of which 7 to 8 million tonnes could be recovered
- The recycling rate of household waste is around 7-8%, which remains very low; nearly 50% of this waste is organic, followed by packaging waste, especially plastic, which represents 15% of household waste.

Collected quantities of municipal waste in the three Wilayas are between 400 and 500 tonnes/year.

IMPLEMENTING BODIES

AGID was an Algerian-Belgian cooperation project implemented by the Belgian Development Agency and the National Waste Agency (AND) of Algeria. In the framework of the project, three public Belgian solid waste operators signed a framework cooperation agreement with ENABEL (the Belgian Development Agency) to carry out Technical Assistance missions for the project in Algeria:

KEY INFORMATION

- **Topic:** collection, recycling
- **Waste fraction:** municipal waste
- **Target group:** municipalities
- **Instruments:** capacity building, infrastructure, communication

DATE OF IMPLEMENTATION

From May 2014 to 30 June 2019.





- TiBi: formerly known as Intercommunale pour la Collecte et la Destruction des Immondices (ICDI) is a consortium of municipalities in charge of the management of waste in the region of Charleroi (for more than 423,000 inhabitants).
- Bruxelles-Propreté is the agency for waste management for the Brussels Region (1.2 million inhabitants), whose main missions are the collection and treatment of household waste, cleanliness, and education for the environment.
- Intradel is the inter-municipal agency in charge of managing household and similar waste: prevention, reuse, collection, sorting, recycling, recovery and disposal. It intervenes at the level of 72 municipalities of the Province of Liege (representing 1.2 million inhabitants).

KEY STAKEHOLDERS INVOLVED

- Regional and local authorities (Wilayas) and cooperatives of Mascara, Mostaganem and Sidi Bel Abbes
- Local NGOs
- Several Algerian Ministries, including: Ministry in charge of Environment, Ministry of Finance, Ministry in charge Local Authorities, Ministry of Foreign Affairs
- ENABEL: who has framework cooperation agreements with several partners in Belgium and whose "professional" skills are used in the implementation of its projects.

CONTEXT OF THE COLLABORATION

The Belgian cooperation is present in Algeria for more than forty years in the field of waste management. The provisions for AGID were governed by the General Convention on Development Cooperation signed in Brussels on 10 December 2002 between the Kingdom of Belgium and the People's Democratic Republic of Algeria. Within this framework, two Indicative Cooperation Programmes (ICP) had been developed, one of which was AGID.

DESCRIPTION OF THE ACTIVITIES

The AGID programme covered all aspects of waste management: organisation of collection, operation of infrastructure, technical control of equipment and awareness campaigns.

The project aimed to demonstrate the feasibility of new models of household waste management in the three Wilayas mentioned above, based on waste recovery and recycling. It was based on three axes:

- Capacity building on:
 - waste management: collection, sorting at source, composting, development of waste recovery streams,
 - management of EPIC¹ collection centres,
 - communication and awareness for the mobilisation of civil society actors.
- Infrastructure: construction of 3 transfer centres, 3 composting centres, 3 sorting centres, pilot projects for the development of new waste recovery streams.
- Instruments: acquisition of tools and software, training and educational support for local actors.

¹ Etablissement public à caractère industriel et commercial



FINANCING

The overall project budget was:

- Algerian contribution: 1,000 million DA
- Belgian contribution: 11 million euros

MAIN ACHIEVEMENTS AND RESULTS

The AGID project has developed several tools to produce quality data and tools to process them. The main project results can be summed up as follows:

- The National Waste Information System (SNID): waste tracking system for recording flows with the involvement of the National Waste Agency and the Wilayas.
- Enhanced citizens' awareness on the importance of proper waste management: an awareness-raising kit and educational activities on waste sorting.
- The organization and optimization of the collection of household and similar waste: geolocation of waste collection through the monitoring of collection via a server (by truck and by area) and a Master Plan via GIS.
- The construction/equipment of new infrastructure.

KEY FACTORS OF SUCCESS

The project was coherent and clearly anchored in the national policies of Algeria and well suited to the new vision for: the development of integrated waste management in Algeria; the creation of recovery companies; and the establishment of recovery channels. It also provided a response technically appropriate to meet the country's needs and priorities.

To a large extent, AGID contributed to the capacity building of the AND. The regional branch of the AND in Oran has acquired professional experience and a certain maturity which makes it more able to fully play its role of supporting the 3 Wilayas addressed by the project. This experience could serve as a model for other regional branches.

Other successes of the project were:

- The mobilisation of key stakeholders around common objectives, and getting them all involved in the new model of waste management.
- Awareness and education programmes addressing all levels of society including children.
- The digitalization of waste data in a single system to monitor the collected waste.

BOTTLENECKS, LIMITATIONS AND CHALLENGES

The AGID project was an ambitious project with significant financial resources to be used over a short period of time. The project planning included the construction of industrial waste recovery infrastructures (sorting/composting) in the 3 wilayas of the intervention zone. However, only one sorting centre out of three was constructed (yet not operational, due to administrative delays e.g. public procurement procedures that were underestimated).

In order to give itself a better chance of success, the project should probably have involved much more the authorities of the Wilaya and their supervisory authority, MICLAT. Nevertheless, the AGID project has valuable lessons learned, particularly about the importance of bringing in more realism to the discourses which are often very theoretical and too idealistic when it comes to transitioning to a green and circular economy.



LESSONS LEARNED AND REPLICABILITY

- Integrated waste management involves many stakeholders and professionals requiring a lot of coordination and management.
- The difficulties linked to household waste management (lack of waste sorting at source, traceability in the management of flows, landfill sites, citizen engagement, etc.) were underestimated when the project was formulated. A proper initial assessment of the critical elements is essential before launching the actions.

Should this type of project be replicated, the following elements are crucial to be considered:

- Realism and time management: properly assess and facilitate the administrative procedures linked with public procurement to avoid delays. Be aware of the context and culture of the country in order to adapt and anticipate alternative solutions in the case of any difficulties.
- Update the data system for waste management at the beginning of the project, to be able to follow the evolution of waste volumes per day and assure traceability.
- Good coordination with all the institutional partners, private actors, and the civil society in the value chain of household waste is required in order to:
 - Secure the involvement of all the actors in the waste value-chain.
 - Raise awareness and educate the general public to ensure that they engage in waste sorting and collection
 - Ensure the traceability of waste flows

REFERENCES, LINKS TO FURTHER INFORMATION

<https://open.enabel.be/fr/DZA/2136/p/appui--la-gestion-intgre-des-dchets.html>

<https://agid-algerie.org/2018/12/19/atelier-a-sidi-bel-abbes-sur-lorganisation-de-la-collecte-et-le-recours-a-la-geolocalisation/>

AGID -Appui à la Gestion Intégrée des Déchets (ALG 14 020 11) Algérie

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