

## TC Document

### I. Basic Information for TC

▪ Country/Region:	REPUBLICA DOMINICANA Isthmus & DR
▪ TC Name:	Apoyo a la digitalización y a la gestión integral de los servicios de saneamiento y de residuos sólidos en la República Dominicana
▪ TC Number:	DR-T1242
▪ Team Leader/Members:	Perez Monforte, Sergio (INE/WSA) Líder del Equipo; Correal Sarmiento, Magda Carolina (INE/WSA) Jefe Alternativo del Equipo de Proyecto; Rihm Silva, Juan Alfredo (INE/WSA) Jefe Alternativo del Equipo de Proyecto; Velasquez Rodriguez, Manuela (INE/WSA) Jefe Alternativo del Equipo de Proyecto; Barragan Crespo, Enrique Ignacio (LEG/SGO); Carlos Guiza (INE/WSA); Diana Champi (INE/WSA); Garcia Rodriguez, Yocauris Del Carmen (CID/CDR); Jacquet, Bruno (CSD/RND); Kirkagacli, Romina Emanuela (VPC/FMP); Lefevre, Benoit Jean Marie (CSD/CCS); Marmolejos, Jenniffer Elena (CID/CDR); Palacios, Amalia (INE/WSA); Rodriguez Vera, Maria (INE/WSA); Salabie, Denise Ann (VPC/FMP); Sturzenegger, German (INE/WSA); Tapia Alba, Mauricio (VPS/ESG); Viteri Burbano, Maria (VPS/ESG) CAROLINA (INE/WSA); CARLOS GUIZA (INE/WSA); VITERI, MARIA AMELIA (VPS/ESG); TAPIA, MAURICIO (VPS/ESG)
▪ Indicate if: Operational Support, Client Support, or Research & Dissemination	Apoyo Operativo
▪ If Operational Support TC, give number and name of Operation Supported by the TC:	DR-L1156
▪ Date of TC Abstract authorization:	23 Mar 2022
▪ Beneficiary (countries or entities which are the recipient of the technical assistance):	Dominican Republic
▪ Executing Agency	Inter-American Development Bank
▪ Donors providing funding (amount and Fund's name):	Fondo Especial de Japon(JSF)
▪ IDB Funding Requested:	US\$1,000,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period	36 months
▪ Required start date:	October 2022
▪ Types of consultants (firm or individual consultants):	Individuals; Firms
▪ Prepared by Unit:	INE/WSA-Agua y Saneamiento
▪ Unit of Disbursement Responsibility:	CID/CDR-Rep República Dominicana
▪ TC Included in Country Strategy (y/n):	Yes

▪ TC included in CPD (y/n):	Yes
▪ Alignment to the Update to the Institutional Strategy 2020-2023:	Inclusión social e igualdad; Productividad e innovación; Capacidad institucional y estado de derecho; Sostenibilidad ambiental; Igualdad de géneroInstitutional Capacity and Rule of Law; Environmental sustainability; Gender equality

## II. Description of the Associated Loan

- 2.1 **The Integral and Sustainable Solid Waste Management Program in the Great Santo Domingo** (DR-L1156) has the objective to contribute to the improvement of the comprehensive management of Solid Waste in the Dominican Republic, with a special focus in the Great Santo Domingo area. As specific objectives, it seeks to: (i) ensure the proper final disposal of Solid Waste and mitigate the negative environmental and social impacts of landfills and open-air dumps located in the areas targeted by the intervention; (ii) increase the recovery and valorization of Solid Waste promoting the social inclusion of informal recyclers, gender equity and the participation of women; and (iii) reduce the generation of GHG emissions in the management of Solid Waste.
- 2.2 In this regard and to achieve its main objective, the Program will be developed through three components: (i) component one. Closure of open-air dumps (IDB US\$32.6 million; JICA US\$32.6; AECID US\$10.8 million). This component will finance the closure of open-air landfills, as well as the design, construction, and operation of biogas collection systems within the framework of GHG emission mitigation to avoid contamination of water and soil, resources; (ii) component two. Sanitary landfills, auxiliary cell, recovery plants and transfer stations (IDB US\$6.5 million; AECID US\$6.5 million). This component will finance the design, construction, and operation of sanitary landfills, treatment plants, recovery plants, and transfer stations, including the construction and/or equipment of the auxiliary cell in the Duquesa landfill as a transition measure to the closure and designation of the new final disposal site; and (iii). component three. Institutional strengthening, support for sustainable management and social inclusion (IDB US\$3.1 million; JICA US\$10.4 million; AECID US\$2.7 million; GRF US\$0.8 million). This component will finance the Ministry of Environment and Natural Resources' (MIMARENA – Spanish acronym) technical assistance for the implementation of the new national plan and the corresponding regulation, including the development of planning instruments, such as the national solid waste management plan and municipal plans for comprehensive waste management.
- 2.3 To support the design and execution of the main loan operation, the approval of the following TC is necessary.

## III. Objectives and Justification of the TC

- 3.1 **Objective.** Support the execution of the integrated management of solid waste and sanitation operations (DR-L1156 and DR-L1158) through: (i) the implementation of digital tools that promote the optimization of inclusive water, sanitation and waste services, including a gender approach; (ii) the development of strategies, conceptual studies and final infrastructure designs to improve sanitation and solid waste management; and (iii) support the development of innovative financial mechanisms aligned with the climate change agenda. The operation DR-L1156 is under preparation and the approval is expected on November 23, 2022.

- 3.2 **Justification.** The General Law for the Integrated Management and Co-processing of Solid Waste of the Dominican Republic (Law 225 of 2020) aims to promote the use and recovery of solid waste, as well as to regulate collection, transportation and sweeping systems, final disposal sites, transfer stations, collection centers and recovery plants in order to guarantee the right of all people to live in a healthy environment, protect the health of the population, and reduce the generation of greenhouse gases emitted by waste.
- 3.3 The new law also established the planning instruments, the structures and roles of public agencies, and the financing mechanisms to guarantee the sustainability of the service, including the National Plan, the National System (SINGIR), the Department for Integrated Waste Management, the Information Subsystem, the Trust, the creation of a green bond as an instrument to finance green projects defined in the Law (which may be issued by the Trust), and the Social Inclusion Plan. MIMARENA is the governing authority for national policy and regulation of waste management under the new law. In the specific case of the Duquesa landfill, and due to the declaration of emergency, the management of the site is under the responsibility of the Ministry, which has allowed for significant improvements in its operation in recent months.
- 3.4 The new law includes the creation of a Public-Private trust fund for the integral management of MSW, which is fed by the special annual contribution paid by all legal entities and public or private institutions and other sources, and whose resources are destined to the operation of transfer stations, recovery plants, valorization, and sanitary landfills. Under the new law, MSW collection continues to be managed by the municipalities, which have limited technical capacity and insufficient budgets to provide an adequate service. The municipalities charge a fee for the service; however, collection is lower than their expenditure budgets (between 2% and 10%), with the National District and Bajos de Haina showing the best results (41.5% and 34%). The municipalities do not have information systems (e.g., client and accounting), and the capacity for planning, regulation, and oversight is weak.
- 3.5 The Dominican Republic produces 1.08 kg/person-day of solid waste, above countries in the Latin America and Caribbean (LAC) region where the average stands at 0.99. Dominican Republic has stood out as one of the countries that has grown the most economically in recent years in the region. In fact, between 2014 and 2018 it was the fastest growing economy in LAC. However, the country lags in indicators of proper solid waste management. It is estimated that in Mexico and Panama, countries such as the upper-middle income Dominican Republic, 74.5% and 57.7% of solid waste generated respectively is disposed in landfills, compared to 0% in the DR since there is no landfill. There are 240 dumpsites in operation in the country, with the Duquesa site being the largest one. The Duquesa with an affected area of more than one hundred hectares and more than twenty-five million tons of waste accumulated in an inadequate way. These sites where there is no technical engineering management lead to leachate contamination of rivers, deterioration of water sources, emission of greenhouse gases (GHG) and other pollutants, loss of value of the surrounding land, loss of raw materials and other usable resources, as well as health problems and loss of well-being of the population. In general, there are no studies for the adequate closure and construction of sanitary landfills to solve the current problem, beyond those carried out within the framework of the execution of DR-T1168. In addition, close to nine hundred vulnerable recyclers, 16% of whom are women, recover recyclable materials at the Duquesa landfill, at the fronts where the

trucks unload MSW, under conditions of high health and hygiene risk. According to studies carried out, there are also women involved in the recycling value chain, who buy fabrics and clothes selected from the waste at the landfill for subsequent washing and marketing, among other trades. In many cases, at the household level, women manage the collection and separation of domestic waste. They are the ones who are in charge of its management and establish the forms of final disposal at home. Therefore, as part of the best practices for the recycling process, gender approach must be present in the efforts that are promoted throughout the value chain.

- 3.6 The country's solid waste management is a responsibility of the municipalities, which have limited technical capacities and insufficient budgets to provide adequate collection, transport, and final disposal of urban solid waste. The municipalities are also characterized by the lack of differentiated client and accounting systems, which limits the estimation of actual costs of services, the calculation of tariffs or the loss of opportunities for cross-subsidization. There is also a lack of municipal ordinances regulating the storage and delivery of waste and little or no supervision of compliance with them when they exist, as well as little oversight of service provider contracts. Cleaning services are also limited; for example, in the country's capital they vary between 80% and 40% coverage. The lack of cleanliness in the streets is aggravated by the inadequate storage and delivery of waste by the population, which fails to comply with delivery schedules, with collection points being observed at numerous points in the city throughout the day.
- 3.7 **Strategic Alignment.** This TC is aligned with Institutional Strategy (UIS) (AB-3190-2) and is aligned with the development challenge of (i) Social Inclusion and Equality, by promoting social inclusion and formalization, with a focus on gender and diversity, of grassroots recyclers affected by the closure of landfills. Additionally, it is aligned with the challenge of (ii) productivity and innovation by improving the integrated management of MSW in the beneficiary cities, which implies the recovery and valorization of waste, and improvement in final disposal. It is also aligned with the cross-cutting areas of: (i) Institutional Capacity and Rule of Law, since it contributes to the improvement of the service management capacity; (ii) Gender Equality and Diversity, by incorporating infrastructure and strategies that contribute to a greater participation of women at all sectoral levels, especially in the recovery and valorization of MSW as well as in the development of diagnostics that allow for a gender strategy both at the level of the MSW management unit of MIMARENA and the ministry itself; and (iii) Climate Change and Environmental Sustainability, by contributing to the improvement of transportation (energy efficiency, electrification or green gas), the closure of open dumps, the proper disposal of MSW, the recovery and valorization of waste and the reduction of GHG emissions through the capture and burning or use of methane. Additionally, it will promote the generation of employment both through the formalization of recycling and through the increase in the volume of business of the materials to be recycled. It also aligns with the objectives of the migration facility (GN 2947-1 and AB-3199). The program also aligns with the 2025 vision on digitalization, gender, and climate change.

#### **IV. Description of activities/components and budget**

- 4.1 **Component I: Strengthening institutional and financial capacities (US\$290,000).** The component will propose innovative schemes to promote solid waste management sustainability in the Great Santo Domingo taking advantage of the opportunities offered by the recently approved new solid waste law. Among the

instruments included in the new law, support will be given to aspects such as: i) support in the elaboration of the National Plan for Solid Waste in areas as the analysis of operating and financial costs of the different stages of solid waste management or the regionalization of landfill sites ii) support for the elaboration of municipal solid waste plans iii) support the inclusion of gender, diversity and climate change aspects in the different instruments of the law (such as training on gender issues for the personnel of the project executing units, integrated solid waste plans with a gender focus, including information disaggregated by sex in the Information Systems and Dynamic Models for information monitoring, among others); and iv) design of the information system for the management of solid waste. The products of this activity are: (i) support of the project implementation units; (ii) support for the development of integrated solid waste plans at national and municipal level. (iii) design the National Solid Waste Information System; and (iv) workshop trainings.

- 4.2 **Component II: Implementing behavioral change science for sustainable consumption (US\$270,000).** The objective of this component is to support the preparation of tools to achieve more sustainable consumption patterns in household solid waste management using behavioral change science. The sustainable consumption framework will cover areas such as recycling, adherence to rubbish truck schedules or separation at source. This will include the development of specific pilot projects as well as more global proposals aimed at training the Ministry of Environment in the sciences of behavioral change and in the development of widely used tools such as manuals. The products of this activity are: (i) Behavioral change pilot projects, with a gender approach; (ii) behavioral change guidelines for waste solid management, o encourage these changes from the management of garbage in the home, with a gender approach; (iii) workshop trainings; (iv) behavioral change program preparation to promote source separation of waste and tariff payments.
- 4.3 **Component III: Solid Waste and Sanitation studies in urban areas (US\$440,000).** The component will support complementary engineering, social and environmental studies to facilitate the execution of operation DR-L1156. It will also support studies to improve complementarity with operation DR-L1158,<sup>1</sup> which is aimed at improving sanitation systems in tourist and coastal areas in the Dominican Republic. As an example of complementarity of sanitation and solid waste improvements, the town of Boca Chica is included in both operations. Importance gains the assistance to the transfer of knowledge in tendering processes and the direct advice in the preparation of tender documents through the implementation of workshops and the expert's assessment. The products to be funded under these components are: (i) project studies in the field of solid waste management and sanitation, with a gender approach; (ii) assistance in the preparation of bidding documents; and (iii) workshops in tendering processes.
- 4.4 **Budget.** The IDB will finance the total TC cost of US\$1,000,000 through the support of the Japan Special Fund (JSF). The TC does not contemplate any local counterpart.

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<sup>1</sup> The bank's board approval of the DR-L1158 operation is scheduled for October 2022.

### Indicative Budget

Activity/Component	IDB/JSF	Counterpart	Total Funding
Institutional and financial sustainability, including gender, diversity, and climate change aspects.	US\$290,000.00	US\$0.00	US\$290,000.00
Implementing behavioral change science for sustainable consumption, manuals, and pilot projects with a gender approach.	US\$270,000.00	US\$0.00	US\$270,000.00
Solid Waste and Sanitation studies in urban areas, with a gender approach.	US\$440,000.00	US\$0.00	US\$440,000.00
<b>Total</b>	<b>US\$1,000,000.00</b>	<b>US\$0.00</b>	<b>US\$1,000,000.00</b>

## V. Executing agency and execution structure

- 5.1 The Bank, through the Water and Sanitation Division (INE/WSA), will implement the TC activities in coordination with the MIMARENA. In accordance with Appendix 10 of the Operational Guidelines for Technical Cooperation Products, as amended by Annex II of document OP-619-4: (i) the Bank has the knowledge and experience in the topics covered by the TC. The Client's Request states that the Bank will execute this technical cooperation.
- 5.2 The decision of the government to have the IDB as the executor is based on the Bank's experience in executing projects of this nature, the Bank's extensive network of contacts and technically qualified experts for this purpose and specifically having into consideration the need to provide services to the approval and execution of the Integrated solid waste management program in the Dominican Republic (DR-L1156).
- 5.3 The execution by the IDB, through the TC team leader, will include: (i) coordinating the implementation of the project; (ii) carrying out the contracting processes for consulting services; (iii) monitoring the progress of activities and products; and (iv) supervising the activities to be carried out by the individual consultants and the implementation of events. The implementation of this Technical Cooperation will additionally strengthen the technical and operative MIMARENAS's capacities necessary for the implementation of the loan DR-L1156, whose execution it supports. Meetings will be held every four months with other institutions such as the EU (European Union) that are working in the solid waste sector in the Dominican Republic. Additionally, with other entities linked to the solid waste sector, such as the Fideicomiso, meetings will be held with a minimum frequency of 2 months.
- 5.4 **Procurement.** The activities to be carried out under this operation have been included in the Procurement Plan and will be executed in accordance with the Bank's established procurement methods. For contracting, the policies for the selection and contracting of consulting firms for operational work executed by the Bank (GN-2765-4) and their respective operational guidelines (OP-1155-4) will be applied, for the contracting of individual consultants the human resources standards (AM-650) and for expenditures related to services other than consulting, the corporate procurement policies (GN-2303-28) will be applied. All knowledge products derived from this TC will be the intellectual property of the Bank.

## VI. Major issues

- 6.1 The main risks associated to this TC are: (i) low institutional capacity of the country in solid waste management; and (ii) low involvement of local governments in project

implementation. To mitigate these risks a working group will be created to share the products and capacity building products will be developed.

**VII. Exceptions to Bank policy**

- 7.1 There are no exceptions to Bank policy.

**VIII. Environmental and Social Strategy**

- 8.1 The TC will finance feasibility or pre-feasibility studies of investment projects and/or associated environmental and social studies, whose terms of reference and products will be consistent with the applicable requirements of the Bank's Environmental and Social Policy Framework (ESPF).

**Required Annexes:**

[Solicitud del Cliente - DR-T1242](#)

[Matriz de Resultados - DR-T1242](#)

[Términos de Referencia - DR-T1242](#)

[Plan de Adquisiciones - DR-T1242](#)