#### **Concept Note**

## Inter Municipal Cooperation

#### Modernization of Solid Waste Collection System

Lead-Applicant: LPA Budesti

IMC Partners: Tohatin, Cruzesti, Colonita (non-CM)

# **Purpose of IMC Project**

The main goal of the proposed project is to improve local infrastructure for collection and transportation waste from villages within four seven local public administrative units: Budesti, Tohatin, Cruzesti, Colonita. The system will serve all the public institutions from the seven villages (four LPAs): schools, community centers, kindergartens, etc. Also, the project aims to increase customer base from 600 to 1,200 contracts in Budesti only, and 4,000 contracts in total for all four communities. A key component is the separate collection of waste, with a focus on the proper disposal of recyclables such as paper, glass, metal, and plastic. The project will support building the institutional capacity of the operator, construction of a garage for adequate safeguarding of the purchased equipment (LPAs contribution) and purchasing of two specialized transport units, means solid waste trucks (USAID contribution). A tractor, trailer (with additional iron shutter), front loader, MKM-190 fail mower, communal rotating brush 2m, communal blade for the tractor, grapple cup 1,8 m (0,5 m3) will be purchased (USAID contribution) for the collection and transportation of the non-recyclable waste of dried vegetations to a special designated point, where dried collected vegetation with no municipal garbage will be composted. Then, the compost will be used for green spaces management. The tractor and the additional equipment will be used for the disposal of 20 unauthorized landfills. 1850 bins (USAID contribution) will be procured for the households' waste collection and distributed as follows: Budesti (1100), Cruzesti (350) and Tohatin (400). Part of beneficiaries from Tohatin (700 households) are already equipped with bins. In Colonita community, all the households are endowed with bins from a project funded by the National Ecological Fund. Public and private entities are equipped with dumpsters that allow disposal of large quantities of waste. The cluster-LPAs will engage in performing works to liquidate/closeout the 20 unauthorized landfills, as well as caring out information and education campaigns aimed at reducing the volume of waste and encouraging waste recycling at origin. The communities will engage in cleaning up the road to the existing landfill (clearing the debris carried by the wind, planting fast growing trees (acacia family) as a wind barrier, and enhancing control for illegal dumping of waste). In the long term, the plan of the communities is to close the existing landfill (this activity is currently not under proposed IMC but administered by Boscana LPA from Criuleni raion).

# Sumary of the problem/needs

The current condition of solid waste system in Budesti and the neighboring communities is very poor due to weak capacity of contracted operator and lack of transportation equipment. The waste is collected by the Municipal Enterprise from Tohatin community, and its services are not properly organized because of lack of equipment, one truck is deserving 4 communities. Only 50 % of households have signed contracts with the operator because of the insufficient trucks to collect the waste. The waste is not collected on time and not on all the streets, and the trucks are not properly sized damaging the local roads. The existing landfill is an open space on a plot of land not properly equipped and located in the

immediate proximity to Budesti, generating fumes, debris, and, as a result, with a negative impact on the environment and on the health and safety of the inhabitants. The communities already refuse to utilize the existing landfill and the waste is transferred to the proposed regional processing unit serving Chisinau Municipality. Twenty (20) unauthorized landfills are in these communities, which is needed to be liquidated using the special equipment.

#### **Beneficiaries and Benfits**

		Gender		Age Cohort		
Locality	Total	Male	Female	0-17	18-64	64+
Budesti	4,928	2,426	2,502	1,205	3,420	303
Colonita	3,367	1,656	1,711	765	2,339	263
Cruzesti	1,815	879	936	381	1,296	138
Tohatin	2,596	1,277	1,319	575	1,866	155
Total	12,706	6,238	6,468	2,926	8,921	859

It is anticipated that the improved waste collection and transportation service will:

- Lead to the liquidation of 20 unauthorized landfills;
- Reduce the significant impact on the Environment;
- Reduce the impact on health and safety of the inhabitants from these communities;
- Contribute to separate collection of waste: paper, glass, metal, plastic, etc;
- Increase the number of beneficiaries to about 12,000 inhabitants as well as all public institutions from the 7 villages (4 LPAs): schools, community centers, kindergartens, etc.

#### Major/key Activities

- 1. Purchase of two specialized transport units (solid waste trucks),
- 2. Purchase of a tractor, trailer (with additional iron shutter), front loader, MKM-190 fail mower, communal rotating brush 2m, communal blade for the tractor, grapple cup (1,8 m) 0,5 m3
- 3. Construction of one garage for adequate safeguarding of the purchased equipment which includes acquisition of works, construction materials, and construction equipment services needed for this purpose.
- 4. Procurement of the total of 1,850 bins for households' waste collection.
- 5. The communities will engage in cleaning up the road to the existing landfill (clearing the debris carried by the wind, planting fast growing trees (acacia family) as a wind barrier, and enhancing control for illegal dumping of waste).
- 6. Selection of recycling materials at source consisting of separate bins and special routes (announced pick-up schedule) put in place for collection of recyclables (paper, metal, glass, plastic), for organic materials (leaves, branches), construction waste (bricks, concrete, stones), electric and electronic waste (batteries, appliances etc.)
- 7. Liquidation of the existing 20 landfills, as well as information and education campaign aimed at reducing the volume of waste and segregation of recycles at origin.
- 8. Creation of the IMC operational management structure

#### **Budget**

The estimated total cost of the project is \$ 391,236.16 out of which the anticipated the CM support is \$ 239,581.66 and LPAs' contribution \$151,654.50 (38,76%).

Cost lines	CM (MDL)	LPAs (MDL)
Procurement of one truck with 16 m <sup>3</sup> capacity	1 535 430.00	
Procurement of one truck with 10 m <sup>3</sup> capacity	1 005 246	
Acquisition of 1850 bins with capacity 120 liters, black color	666 000	
Procurement of the Tractor	410 000	
Procurement of the Front Loader 1600 (1025)	96 000	
Procurement of the Trailer for the Tractor 2 PTS-5 (with additional iron shutter)	117 600	
Procurement of Communal rotating brush 2m with collector	84 000	
Procurement of Communal Blade T 218	36 000	
Procurement of Flail mower MKM 190	135 000	
Procurement of Grapple Cup 1.8 m (0,5 m3)	45 040	
Technical design, author supervision, technical supervision		102 100
Garage construction works		2 083 378.05
CASCO Insurance for 2 trucks, tractor and trailer		105 000
RCA Insurance for 2 trucks, tractor and trailer		12 000
Road Tax for 2 trucks, tractor and trailer		15 000
Liquidation of 20 unauthorized landfills		165 000
Total Estimated Project Costs (MDL)	4 130 316	2 614 478.05
Total Estimated Project Costs (USD) \$1 = 17.23 MDL (28 December 2020)	<b>\$239,581.66</b>	\$151,654.50
71 - 17.23 MIDE (20 DECEMBER 2020)		

# **Expected Results until March 2023**

- 1. Institutional setup of the IMC operator
- 2. Preparing technical documentation, including tender dossier
- 3. Procurement and contracting
- 4. Project implementation
  - purchase of two specialized transport units
  - purchase of the special equipment: tractor, trailer, front loader, MKM-190 fail mower, communal rotating brush, communal blade, grapple cup 1.8 m (0,5 m3).

- acquisition of works, construction materials, and construction equipment services needed
- construction works for the garage
- liquidating the 20 unauthorized landfills
- launch information and education campaign aimed at reducing the volume of waste and segregation of recycles at origin.
- 5. Reception of the completed works

## **Technical Assistance provided by the CM**

- -defining juridical-organizational form of the IMC Operator;
- -establishing the IMC operational management structure;
- -facilitating agreements and procedures among LPAs and the Operator;
- assistance in the elaboration of a business plan with an estimative budget to ensure efficient operation and financial sustainability of the IMC service;
- improve citizen engagement to monitor functioning of IMC arrangements;
- mentoring on operating or long-term maintenance of the specialized equipment.

## Key prerequsites for sustainability

- LPAs as founders of IMC management structure (Operator) will use legal leverage to monitor Operators' activity and make necessay adjustments/corrections to ensure efficient and qualitative provision of services
- Continuos training/capacity building of the IMC operator;
- Support from LPAs for the IMC Operator with the necessary investments and tax collection;
- Peer- learning from good practices of other Communities.