

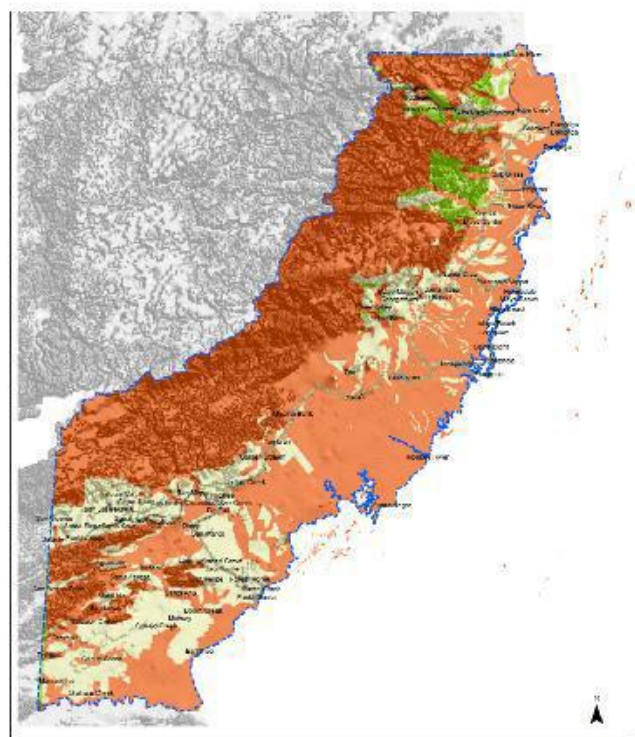
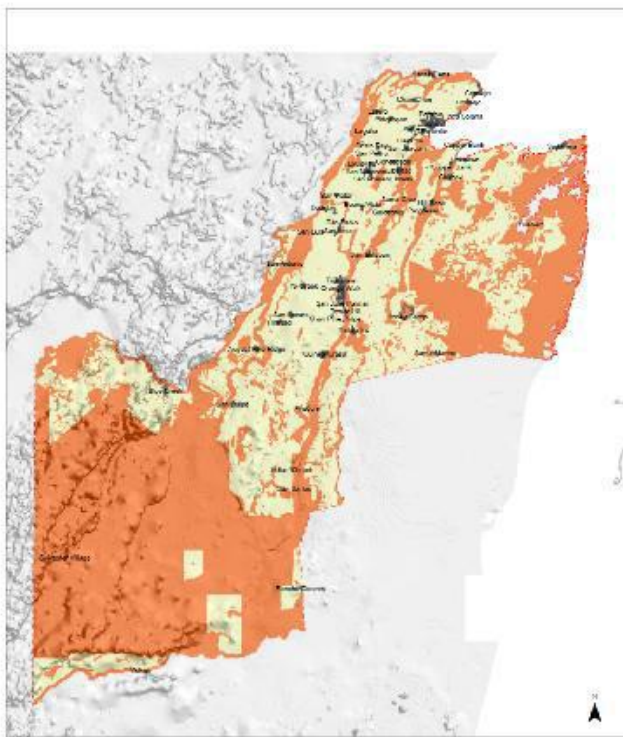


GOVERNMENT OF BELIZE

MINISTRY OF NATURAL RESOURCES AND IMMIGRATION

Belize Solid Waste Management Agency

Solid Waste Master Plan for Emerging Tourism Areas



Social Inclusion Framework

REV.4.1, May 2016



DATA SHEET

Project Name: Consultancy Services to Prepare a Solid Waste Master Plan for Emerging Tourism Areas
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LIST OF ACRONYMS AND ABBREVIATIONS

BATNEEC	Best Available Techniques Not Entailing Excessive Costs
BoQ	Bill of quantities
CF	Composting Facility
CO	Construction and Operation
CQA	Construction Quality Assurance
DBO	Design, Build, and Operate
DOC	Drop Off Centre
DoE	Department of Environment
ESIA	Environmental & Social Impact Assessment
ESMP	Environmental and Social Management Plan
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EU	European Union
FS	Feasibility Study
HDPE	High-density polyethylene
IDB	Inter-American Development Bank
LFG	Landfill Gas
LEL	Lower Explosive Limit
MASW	Multi-channels Analysis Surface Waves
MRF	Materials Recycling Facility
MSW	Municipal Solid Waste
MNRA	Ministry of Natural Resources and Agriculture
MSWM	Municipal Solid Waste Management
NSR	Noise Sensitive Receivers
PIU	Project Implementation Unit
PM	Project Manager
RCV	Refuse Collection Vehicle
RFP	Request for Proposals
RORO	Roll On-Roll Off
SIP	Social Inclusion Plan
SIF	Social Inclusion Framework
SW	Solid Waste
SWM	Solid Waste Management
SWaMA	Solid Waste Management Authority
SWMP	Solid Waste Management Project
QA/QC	Quality Assurance and Quality Control
ToR	Terms of Reference
UEL	Upper Explosive limit
WASA	Water and Sewerage Authority
WB	World Bank
WTE	Waste-to-Energy

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NB

Through all the document the unit measures are always referred to the Metric System unless otherwise explicitly specified. The symbols Mg (mega-gram) and ton (metric tonne) are equivalently used to express the same metric tonne. Spelling is done based on UK-English.

Unless explicitly specified any reference to dollar (\$) refers to Belize Dollars (BZ\$ or BZD).

Decimal separator is expressed by a dot (.) and thousand separator is expressed by a comma (,).

Because this is a public document no names of persons have been included. All personal references can be found in the project files.

1 BACKGROUND

Belize suffered an urgent need for improved waste management due to lack of proper infrastructure for waste treatment and disposal. A number of dumpsites have severely deteriorated the environment for several years. This prompted the Government of Belize to apply for a loan from the **Inter-American Development Bank (IDB)** and the **OPEC Fund for International Development (OFID)** for the implementation of the **Solid Waste Management Project (SWMP)**. As listed in the draft National SWM Policy major results are:

- Closure of a large dump site close to Belize City (Mile 3)
- Closure of an open dump site close to San Ignacio
- Design, constructions and bringing into operation of a new regional sanitary landfill facility, including access road, to serve the Western Corridor (Mile 24)
- Design, constructions and bringing into operation of two new transfer-loading stations to serve Belize City and San Ignacio / Santa Elena

Further Project components recently completed are:

- Closure of open dump sites in San Pedro and Caye Caulker
- Construction and bringing into operation of two new transfer-loading stations to serve San Pedro and Caye Caulker
- Closure of a dumpsite and construction of transfer station along the Burrell Boom – Hattieville Road

The SWMP has addressed solid waste management needs in the central regions of Belize (Cayo and Belize Districts) and the Northern Islands of Ambergris and Caye Caulker. The GOB has now identified the need to expand solid waste management to the other regions in Belize, especially those that are to become key tourism destinations, both in the Country's Northern Corridor (Orange Walk and Corozal Districts) and in the Southern Corridor (Stann Creek and Toledo Districts).

HYDEA SpA (The Consultant) has been awarded the contract for the execution of the **Consultancy Services to Prepare a Solid Waste Master Plan for Emerging Tourism Areas**.

This report was prepared by the Consultant in response to the Terms of Reference of the Consultancy Contract to provide the initial information needed to support the following phase of Solid Waste Management planning for the two Regions.

This document presents the draft Social Inclusion Framework (SIF)¹ as part of the Environmental Assessment (EA) for the **Solid Waste Master Plan for Emerging Tourism Areas**.

This document contains descriptions of:

- 1) The Project and its identified livelihoods impacts
- 2) The Project-affected population
- 3) Eligibility criteria and cut-off date
- 4) Applicable legal and policy framework

¹ The Social Inclusion Framework has been prepared in close coordination with the Social Inclusion Plan (SIP) prepared for the Transfer Station at Mile 3 which forms part of the Solid Waste Management Project (SWMP I), so as to guarantee maximum coherency between the implementation of the two documents by SWaMA. It is recommended that in the principals set out in this SIF are taking into consideration when preparing SIP for other similar sites in Belize, including the Recyclers Inclusion Plan for Belmopan.

- 5) Consultation and disclosure arrangements and results of consultations held
- 6) Grievance redress mechanism
- 7) Proposed compensation options
- 8) Implementation timetable
- 9) Estimated budget
- 10) Institutional arrangements and capacity
- 11) Monitoring and evaluation framework

2 PROJECT DESCRIPTION

2.1 Introduction

This chapter will describe the main components of the project and those activities that potentially could have an impact on those persons that are currently recovering recyclable materials in the open dump sites found in the project area.

The purpose of this Social Inclusion Framework (SIF) is to set out the principles and procedures for addressing livelihoods impacts of the activities of the *Solid Waste Master Plan for Emerging Tourism Areas*, with the aim of maintaining or restoring the incomes of all affected persons to levels equal or superior to those prior to closure of the dump sites in improved conditions, through continued work in the waste sector or via alternative income activities. The document is intended as a framework document² for the six dump sites that will be remediated as part of the Master Plan activities, in which specific location related activities will be detailed where appropriate. A site specific Social Inclusion Plan (SIP) will need to be prepared³, when each of the proposed dump sites will be closed and remediated.

Specific objectives are:

- to increase the productivity and profitability of their work
- to provide them with adequate, reliable and safe access to recyclable materials
- to develop viable alternatives where the above points are impossible or undesirable
- to formalize their status and help improve their social recognition, legitimacy, and access to social benefits (depending on their final status)
- to strengthen their capacity, skills and collective organization
- to address the needs of particularly excluded or vulnerable groups

2.2 Project Components

In 2015, an estimated 25% of the total population of the four districts resides in the four district Capital towns of the study area (see Table 1). By including the villages within a radius of 10 km of these towns and those around the villages of Independence and Palencia, 43% of the district population would be concentrated in and around these six population centres. The remaining 57% of inhabitants live in the other (rural) parts of the four districts.

Table 1 Estimated population in the four districts of the project area (2015)

Location	Corozal District	Orange Walk District	Stann Creek District	Toledo District	Total	%
District Capital Town	11,753	14,588	10,281	5,870	42,493	25%
Village within 10 km of District Capital	9,391	9,860	739	1,337	21,328	12%
Total Main Agglomerate	21,144	24,448	11,020	7,208	63,820	37%
Other agglomerates	-	-	9,685	-	9,685	6%
Population living outside agglomerates	25,004	25,327	30,541	27,850	99,037	57%
Total District	46,148	49,776	41,561	35,058	172,542	100%

² It is recommended that a site specific SIP will be prepared prior to closing of the each of the dumpsites.

³ Including a site specific consultation process with the recyclers present at each of the dumpsites.

Notes:

1. Population projections calculated based on census data from 2010.
2. Independence and Placencia

The proposed waste management system is structured around six transfer stations⁴ (see Table 2) located in these main six population centres found in the two corridors, denominated as *agglomerates*.

Each transfer station serves as a central point for receiving the collected waste⁵ from the adjacent town (or village as is the case of Independence and Placencia) and the villages within a 10 km radius from that population centre.

Table 2: Description of the proposed Transfer Stations

District	Locality	Brief description of Location
Corozal District	Corozal Town	Along the Chan Chen Road 3 km off the Town limits (present location of the Slaughterhouse). National Land
Orange Walk District	Orange Walk District	2.5 km from the Northern Highway south of Orange Walk Town, present location of the Orange Walk Dumpsite. The parcel is owned by ASR-BSI that expressed interest to hand it over to the Government for the purpose.
Stann Creek District	Dangriga	Along the Southern Highway 1 km south of the Hummingbird Highway junction. Adjacent to the present Dangriga Dumpsite. Land owned by the Dangriga Town Council and available for the project.
Stann Creek District	Placencia	Presently foreseen at the Placencia Dumpsite location. A more suitable site closer to the peninsula is currently being sought.
Stann Creek District	Independence	Along the Southern Highway 1 km south of the Independence Road junction. Present location of the Independence Dumpsite. The site laid on a marginal part of the Mango Creek Forest Reserve now de-reserved.
Toledo District	Punta Gorda	Along the Barranco Road, 16 km off the Punta Gorda Town limits. Land owned by SWaMA.

The conceptual design of each transfer station considers the option that recyclers can have access to the collected waste that is received from the *agglomerates*, so as to recover recyclables prior to the waste being uploaded into a trash trailer for transportation to the sanitary landfill for final disposal.

The final destination of the collected solid waste will be the national sanitary landfill located at Mile 24 in the Western Corridor which will be expanded with the necessary new cells to accommodate for the waste.

Currently the collected waste in the corridors is either dumped at the authorized open dumps found in the towns and in Independence and Placencia or at the outskirts of the villages in the rural areas.

The dumpsites (see Table 3) located in these six populations centres will be remediated.

In addition, recycling activities of persons actively recovering materials have been found at two dump sites in the Corozal District, namely:

- Dump at Free zone dump site
- Consejo Village dump site

⁴ This SIF would refer only to those infrastructures that are included in the related IADB loan.

⁵ The actual collection of the waste generated in the urban areas (and the associated costs) does not form part of the scope of the consultancy.

Table 3: Location of dumpsites that will be remediated

District	Location of dumpsite	Brief description of dumpsites to be remediated
Corozal District	Consejo Road	15 acres of flood prone area. About 15,000 cubic meters of waste piles irregularly deposited on the ground. Private land.
Orange Walk District	Chan Pine Ridge	40 acres irregularly covered by about 15,000 cubic meters of waste piles deposited on top of the ground. Land owned by ASR/BSI
Stann Creek District	Dangriga	6 acres parcel entirely covered by excavated trenches backfilled with waste. Land is the property of the Crown.
Stann Creek District	Placencia	The official dumpsite is a 6 acres area where the waste is deposited in excavated trenches. Waste piles are also present along the access road and in two nearby areas. The land is private property.
Stann Creek District	Independence	Waste is deposited in excavated trenches spread over a 4 acres area. The land was part of the former Mango Creek Forest Reserve.
Toledo District	Punta Gorda	Waste is deposited in a single mass about 8 acres wide in a low lying area. More waste piles are present along the access road. The land is private property.

2.3 Relevant Activities, Associated Impacts and Initial Measures

The construction of a transfer station in each of the six population centres will have an impact on the flow of solid waste in each of these towns and villages. Once the transfer station becomes operational it will receive the collected solid waste from its catchment area, and this collected waste will no longer be deposited at the current open dump site in that specific town or village.

As such, from that moment onwards, the persons currently active at the open dump site recovering recyclable materials for commercialization will no longer receive a waste stream from which they can retrieve materials. This loss of access to recyclable materials could potentially affect their primary source of income and result in impacting their livelihood negatively.

A second project activity that will affect those working on the current dump site in a potential negative manner, is the remediation and closing of the current open dump sites once the transfer station in the respective town or village goes into operation. The closing of the open dump and implementation of remediation measures mean that the waste materials (that are still there) will be covered and the access to any valuable materials within will be restricted. These measures seek to provide environmental and public health benefits, but at the same time will most likely impact the economic livelihoods of those working on the dump sites. For those circumstances where there are actually dwellings on a dump site, in which people live permanently, the remediation measures could result in the need to demolish these dwellings and to resettle those living in them.

This Social Inclusion Framework will set out the possible mitigating measures to minimize the impact these two activities of the Solid Waste Master Plan⁶ could have on the livelihoods of those vulnerable groups that work on the dumpsites.

⁶ This SIF would refer only to those infrastructures that are included in the related IADB loan.

3 PROJECT AFFECTED POPULATION

During the months of April-October 2015 the consultant team visited⁷ the dump sites in the four district capital towns and villages of Independence, Placencia and San Antonio (Toledo District) with the purpose of verifying the presence of informal recyclers on each of these sites and assess with those present on their current activities and how the operations of an eventual transfer station in their town or village would affect their livelihood. This chapter provides an overview of the findings from the visits to each of the dump sites.

A distinction will be made on the type of affected population found on the dump sites, primarily:

1. Recyclers working at the dumpsites **permanently**
2. Recyclers working at the dumpsites **temporarily**
3. A third category could be watchmen that perform recycling activities and receive payment from the municipality

Each category would be eligible for a different type of compensation.

Details of the reports of the visits to each dump site are available in the project files.

3.1 Context

There is no national recycler's organisation in Belize. Except for the recycler's formally active at the Mile 3 Transfer Station, all other recyclers operated in an informal manner and mainly on an individual basis although some form of *loosely structured organization* can be found on some dump sites.

The recovered materials fall into two main categories, a) plastic and glass beverage bottles that are mainly commercialized locally for further processing before exportation and b) metals that are sold to buyers from Mexico and Guatemala who come to the dumpsites at different intervals to buy the accumulated quantities.

At most of the dump sites there are 1-2 *vendors* present, who have some form of vehicle (mostly a pick-up). They sell the recovered materials to the middle men and the buyers that come from Mexico and/or Guatemala.

The next section gives an overview of the recycling activities found at the different dump sites in the four districts.

3.2 Results of Initial Census Socioeconomic Baseline Survey⁸

3.2.1 Corozal District

In the Corozal District, three locations were visited where the presence of (informal) recyclers was observed, namely the dump site at Corozal Town, the recyclers' family that operates from a site near

⁷ All visits were made unannounced. Although all dump sites (except San Antonio) were visited on at least two occasions by the team, the main interviews and conducting of the initial recyclers census was done during the month of October 2015 by the local consultant. It should be noted that not all those recyclers present at the dump sites were willing to complete the Recyclers Census form, even though they participated in providing general information in the group discussion.

⁸ This census will need to be updated when preparing each of the SIPs for each of the individual dumpsites that will be financed by the corresponding IADB loan.

Paraiso Village and the dump site near the Free Zone in the north of Corozal District near the Border with Mexico.

Dump site at Corozal Town

The dump site is located 5 kilometres outside of Corozal Town on the road to Consejo, and receives primarily the waste collected in Corozal Town by the sanitation department. There is no official gate or weigh bridge at the dump site, but there is a watchman responsible for coordinating the disposal of the waste for which he receives a monthly salary from the Corozal Town Council. There are 9 permanent adult persons recovering recyclables at the dump site and an additional 10 to 15 who work at irregular intervals, but were not considered by the main group of recyclers as permanent recyclers.

This core group of nine recyclers is formed by 3 couples (husband + wife) and three single male adults, primarily of origin mestizo. Six of them are between 41-55 years old, while the other 3 are 19, 25 and 34 years of age. It should be noted that the husband of one of the couples is the watchman (foreman) of the dumpsite.

All recyclers live within a 6 miles' radius of the dump site (either in Corozal Town or Xaibe), and save one person (who recently started) all have been active at least 3 years sorting and recovering recyclable materials for a living, with 4 of them for more than 10 years. No recycler lives at the dump site and no (permanent) structures were found at the dumpsite, nor has their presence been reported in the past.

Most of the group work together during week days from 7 to 17:00 sorting the recyclables and recovering primarily: metals (aluminium, copper, bronze, cans, iron), glass bottles (local rum bottles) and some hdpe plastic containers. The glass bottles (soft drink and rum) are sold to local companies including Cuello Distillery (Orange Walk) and Bowen and Bowen (Belize City), whilst the aluminium and other metals are sold to Mexican traders.

The reported average monthly income ranges from BZD\$600-900, which is the sole source of income; with the exception of the foreman who receives a salary from the local authorities.

Main points of concern (of the current work practices) raised include:

- There is only limited time to sort because waste is burnt to control pests;
- Lack of shelter, inclement weather conditions, rain and sunlight;
- Transportation and availability of water;
- Sanitary facilities are required, including a shower.

Group members indicated that they would lose their only source of income if the dump site were to be closed. All recyclers are aware of the recycling facilities at the transfer station at Mile 3, and all indicated that they would be interested to work at a similar type of facility if it were close by. The main reason cited being the need for a source of income.

When the new transfer station at Corozal Town becomes operational, the waste collected from Corozal Town will no longer be disposed of at the dump site, but go directly to the transfer station. As such, a total of 8 persons, who work permanently at the dump site, would be affected by the closing of the dump site at Corozal Town, as they would lose their primary source of income. It should be noted that this does not include the Foreman who has a salary from the Town Council. The 10-15 persons, who work temporarily at the dump site and, frequent the dump site at irregular intervals to supplement their income are not

included in this total. Furthermore, as no evidence of permanent dwellings was reported, there would be no need to activate *resettlement activities*.

Figure 1: Recyclers organizing their recovered material at the Corozal Town dump site.



Recycling activities at Paraiso Village

In Paraiso Village, three members of the family (parents and son) actively recover recyclables for commercialization. Previously, the family sorted waste disposed of at the Consejo Village dumpsite, but frequent burning prevented them from recovering enough materials. Consequently, they approached a private land owner to lease of a small portion of his land (located 1 mile from Paraiso Village), where they could receive waste for sorting. The private waste collection company, , which provides collection services in 9 villages around Corozal Town, uses this land to dispose of its waste, which is based on a mutually agreed verbal contract with the family. The family sorts the recyclable materials found in the disposed waste, primarily (scrap metals, paper, cardboard and plastic), which is sold to the Mexican traders and to the soft drink company in Belize City who pays for soft drink bottles for re-use and disposal. This economic activity is the sole source of income for this family of three recyclers.

The new transfer station in Corozal is designed to receive also the waste collected from the villages around Corozal Town, either through direct collection, or through the operation of the Drop Off Centres proposed to serve these villages. Consequently, waste currently collected by private waste collection company would be diverted from the land where the Chable family is currently recovering recyclables to the new transfer station and as such, leaving the recyclers family without a source of income.

Dump site near the Free Zone

This dump site is located near the Free Zone, in the north of Corozal District, close to the Mexican Border, and receives waste from both the commercial activities in the Free Zone and the Casino. There is no gate control or presence of a watchman or employee of a nearby local authority.

During the visit only 1 recycler was encountered, however there was evidence of more extensive recycling and sorting activity. According to the recycler present⁹, the site is frequented by 11 *temporary* recyclers who work three (3) days per week between Mondays to Fridays from 6:00 a.m. to 4:00 p.m. The frequency depends primarily, on when the casino disposes more waste, which would be normally after weekends or festivities. During the Christmas festivities the site is visited daily, because there is a higher production of waste. The recyclers reportedly come from Corozal Town, and the villages of Chan Chen, Paraiso and Xaibe.

Bottles and broken glass are the main materials that are recovered. The bottles are broken, sorted per colour and stored in bags, after which they are sold to a Guatemalan recycler who comes every few weeks, and loads a large truck to take the glass to Guatemala for recycling.

When there are limited materials available at the site, the recyclers¹⁰ also frequent the dumpsite at Consejo to supplement their income.

Figure 2: Storage containers with a high content of potentially recyclable materiales in the Free Zone in north Corozal.



⁹ A complete report of visit is available in the project files.

¹⁰ To avoid double counting these recyclers have only been considered to the Free Zone dump site.

Because the dump site does not receive any waste from Corozal Town and surrounding villages, the operation of the new transfer station in Corozal Town would not necessarily affect the quantity of waste (and as such recyclables) that would be available at the Free Zone dump site. Furthermore, this dumpsite is not included in the list of the proposed dumpsites to be remediated.

At the same time, it should be noted the following assumption is made for the Master Plan concerning the waste entering the system, assumptions and conditions for the Corozal Free Zone (CFZ):

ASSUMPTIONS	CONDITIONS
<u>Free Zone</u>	
1. Only 5% of the generated waste (corresponding to the MSW generated in the Free Zone) is considered to directly enter the system at the Corozal Transfer Station / Landfill	a. 95% of waste generated by the Free Zone is estimated to be Commercial Waste (mostly packaging waste); the high quantities generated are comparable to the quantities of MSW generated by Corozal Town; the composition of the waste, is almost totally recyclables materials; the peculiar institutional status of the Free Zone; the proximity to the Mexican recycling market; these are all factors that suggest the establishment of a specific policy to encourage diversion at source of the recyclable materials from the main stream of the MSW of the rest of the District.

It is recommended that the development of a specific policy for the Free Zone should take into consideration the dump site at the Free Zone and those informal recyclers operating at this dumpsite.

3.2.2 Orange Walk District

In the Orange Walk District the main presence of informal recyclers is found on the dump site, 10 km outside of Orange Walk Town.

The dump site is being controlled by the watchman, who works for the Town Council and his job is to charge a fee for disposal and to burn the garbage. He interacts with recyclers daily and also actively participates in the recycling activities. There is no gate or weighbridge, and the access road is open to anyone.

There are two main groups of recyclers active on the dump site. A group of 20 *permanent recyclers*, who recover materials from Monday to Friday (from 5:00 a.m. to about 2:00 p.m); they do not work on weekends nor on holidays. During the visit in October, 15 of them were present at the time of the interview¹¹. The second group, 10 women, come occasionally to the dump site to collect clothes and other items. These *temporary recyclers* were not present during the visit and the *permanent* group of recyclers do not mingle with them and vice versa. Other than that, they are Belizeans, little else is known about them.

The numbers present of the *permanent group* of recyclers change slightly depending on the season, but it is mostly due to weather. During the rainy season some of them stay away, but they work consistently

¹¹ Only three (including the watchman) completed the Recyclers Census form. The full report is available in the project files.

throughout the year. The group is composed of 18 men and 2 women, ranging in age from 20 to 65 years, all of them are Belizean of Hispanic/Mayan decent. They speak Spanish, English (albeit broken) and Creole, the local language. They come from Orange Walk Town, and the adjoining villages of San Jose Palmar, Guinea Grass, Yo Creek, and Chan Pine Ridge.

One of the woman on site is a buyer but she refused to be interviewed. The group appears to have a coherent structure, although they claim that they act independently and each one sorts his own materials. However, they display “cooperation” in the sense that they all share the same recycling area, and mingle with each other a lot. They are friendly to each other, show each other a lot of respect, and they seem to have little or no internal conflicts within the work site.

The main materials which they recover include aluminium, plastic bottles, glass bottles, copper and bronze. They sell the recovered materials to “middle men”, who buy at a price and sell to the soft drink and rum industries at a higher price, and to the Mexican recyclers. They refused to give information on this. There was one male and his female companion present on site who did this as a trade.

The recyclers’ income averages between BZD \$ 500 – 600 per month, with the watchman making BZD 800 since it complements his salary from the municipality.

Main points of concern (of the current work practices) raised include:

- There is no water on site and it is difficult to find food to buy of food
- The entire site is unsanitary
- Lack of shelter

Figure 3: Make-shift shelter at Orange Walk Town dump used by recyclers to protect from inclement weather and sun.



Each of group members that were interviewed indicated that they would lose their only source of income if the dump site were to be closed. All recyclers are aware of the recycling facilities at the transfer station at Mile 3, and all indicated that they would be interested to work at a similar type of facility if it were close by. The main reason cited being the need for a source of income.

Most recyclers live in houses, albeit in poor conditions, but have potable water and electricity. On the dump site there was a make-shift shelter from inclement weather and sun (see Figure 3). However, no evidence of permanent dwellings was reported, and as such there would be no need to activate *resettlement activities*.

When the new transfer station at Orange Walk Town becomes operational, the waste collected from Orange Walk Town will no longer be disposed of at the dump site, but go directly to the transfer station. As such in total 20 persons would be affected by the closing of the dump site at Orange Walk Town, as they would lose their primary source of income. It should be noted that this does not include the watchman (who has a salary from the Town Council).

3.2.3 Stann Creek District

In the Stann Creek District, three locations were visited where the presence of (informal) recyclers was observed, namely the dump site at Dangriga in the north of the district, and the dump sites of the villages of Placencia and Independence in the south of the district.

Dangriga dump site

The Dangriga dump site is situated on the Southern Highway, 10 km away from Dangriga, the district capital of Stann Creek District. There is an improvised gate at the entrance manned by a watchman, who is paid by the Town Council and who also performs recycling activities. The dump site receives primarily the waste collected from Dangriga Town and there is no weighbridge at the dump site.

During the visit¹² there were only two persons present, one male Guatemalan recycler who operates permanently at the site and a Belizean man¹³ who recovers materials on a temporary basis.

Reportedly, the dump site is also frequented by two other groups of recyclers, although neither of them are active on a permanent Monday to Friday basis on the dump site. The first group of 10 recyclers (half Belizean and half of other Central American nationalities) visit the site twice a week and work from about 7:00 a.m. to about 2:00 p.m, sorting recyclables for commercialization. Their number fluctuates and their presence intensifies during the tourist season, which, according to them, is from December to May. According to those interviewed, this group is not well defined nor well organized. While they sort waste twice a week, some appear one week and some another, but the numbers in terms of consistency remains the same, which is normally at least five of them present, but on that day only two were present.

The main materials recovered are local soft drink, beer, and rum bottles which are sold locally. The availability of these materials fluctuates according to the tourist seasons and in part explains the temporary presence of the recyclers on the site. The *permanent* recycler present recycled other material including copper, aluminium, iron and bronze. These materials are sold primarily to Guatemala

¹² The site was also visited on a number of other occasions during 2015 for activities related to the EA, and no permanent presence of recyclers was observed.

¹³ He did not want to fill out the census form nor have his name registered, although he was willing to provide general information.

middlemen, including *Southern Metal Recyclers* described below. No plastics and papers are recovered, because they are not bought by the Guatemalan middlemen.

Figure 4: Entrance to the Dangriga dump site



The second group, considered as *temporary recyclers*, are Guatemalan women (between 5 and 10) who pass by the dumpsites of Dangriga and Placencia at irregular intervals to collect clothes and shoes for commercialization.

The main problem reported is that not enough material reaches the site because there is too much illegal dumping. According to the interviewee, this is caused by the fee being charged at the gate since January 2015. The general public is unaware that a fee is charged, and when they arrive at the dump site, and they need an official receipt from the Town Council, they need to go back to Dangriga for one and most of them end up dumping on the highways and roads.

The interviewed recycler indicated that he would lose his only source of income if the dump site were to be closed. He is aware of the recycling facilities at the transfer station at Mile 3, and indicated that he would be interested to work at a similar type of facility if it were close by. The main reason cited being the need to earn a living.

If waste collected from Dangriga would be brought directly to the newly planned transfer station at Dangriga this would affect primarily the one recycler who is working permanently at the dumpsite, as he would lose his main source of income. The watchman has a salary paid by the Dangriga Town Council, and is not included in this total. The two other groups of recyclers would frequent the dump on a temporary basis are not included in this total, nor is the owner of *Southern Metal Recyclers* who collects materials from the dump site.

With regards to needs for *resettlement activities*, both the watchman and the *permanent* recycler have a *make shift shelter* on site and they both report to have a residence close to the dump site.

Finally, as no evidence of permanent dwellings was reported, there would not be any need to activate *resettlement activities*.

Placencia dump site

The Placencia dump site is located just off the Placencia Road, relatively distant (29 miles) from Placencia at the tip of the peninsula. The site, is located on privately owned land, and receives waste primarily from the villages located along the peninsula (Placencia, Seine Bight and Maya Beach).

Recycling activities at the dumpsite are heavily dependent on the season, with a marked increase during the tourist high season along the peninsula. During most of the year there is only one *permanent* male recycler who is permanently present at the dump site. He reported¹⁴ during the visit that he lives in a shelter on site, but his family live in a small concrete house in Cow Pen (25 km away from the dump).

In the period December – March a group of *temporary recyclers* (so-called *international recyclers*) are also active at the dump site. The group is composed of four families, in the case of two families the couple work on site, whilst the other families on occasions would bring their children as well. The group members come primarily from Guatemala and Honduras, although reportedly, some might be from Belize as well. It is not clear if they work during the low season and if so where, although the watchman and *permanent* recycler suppose it would be at the banana plantations during the banana season.

There is no official gate or weighbridge at the dump site. There is a watchman, paid by the village council of Placencia, who lives on site and coordinates where the collection vehicles can dispose their waste. The relationship between him and those recycling at the site is ambivalent, he appears to grant the recyclers *permission* to enter the site, and seems to work along with the persons active on site. He claims the “families” work for him, but the one person on site says he works for himself.

The main recyclable materials recovered by the permanent recycler at the site are: local products, soft drink plastic and beer bottles and some rum bottles, which are all sold locally in Placencia. He reportedly earns approximately BZD \$500.00 to \$600.00 monthly.

During the high tourist season, when the *international recyclers* are present, metals are also recovered and there appears to be an agreement that the permanent recycler *stores* any metals he recovers during the time they are not on site. The metals are sold to Guatemalan middlemen.

The main problem reported is the lack of recyclable materials at the site, because of the seasonal fluctuation and poor (perceived) collection services in the peninsula.

¹⁴ Full report of visit is included in the project files.

Figure 5: Overview of materials recovered (left) and many more not recovered (right) at Placencia dump site



The permanent recycler stated that he would lose his only source of income if the dump site were to be closed. He had heard of the recycling facilities at the transfer station at Mile 3, and indicated that he would be interested to work at a similar type of facility if it were close by. The main reason cited being the need to earn a living.

In principal 1 person would be affected directly if waste collected from Placencia would be brought to any of the newly planned transfer stations in the Stann Creek District as well as by the closing of the Placencia dump site, as they would lose their primary source of income. It should be noted that this does not include the watchman who has a salary from the Village Council. The 6-8 members of the *international recyclers* who frequent the dump site only during the period December to March are not included in this total.

With regards to needs for *resettlement activities*, the watchman and the *permanent recycler* have a *make shift shelter* on site, and they both report to have a residence close to the dump site.

Independence dump site

The dump site at Independence is located 9 km away from Independence on the Southern Highway, and was visited three times during the period April - October 2015. No *permanent* recyclers were found during the visit in October 2015, although evidence was found of recyclable materials accumulated from a period of 3-4 weeks. During the visit in April, three young women were present at the site who recovered primarily beverage bottles, but no census was conducted at that time.

There is a watchman¹⁵ at the gate, but he was not present during the last visit.

Figure 6: Recovery of recyclable materials by women during visit to Independence dumpsite in April 2015



¹⁵ The watchman does not recycle at the dump site.

Other recycling activities in Stann Creek District

Two other activities involving recycling were identified during the visits to the dump sites in the southern districts.

First of all, the presence of *temporary recyclers*, a so-called *international group* of (8-10 persons) primarily Guatemalans and Hondurans, who visit the different dump sites¹⁶ on an irregular basis to collect clothes and shoes etc. that they can probably use or sell.

The second is a Belizean registered company called **Southern Metal Recycling**¹⁷ that operates from a property the owner bought at the junction of Red Bank and Southern Highway. The owner is a Guatemalan nationalized Belizean, who collects and transports metals to Guatemala for recycling. Although he mainly deals in scrap metals from old cars, he does buy metals recovered at the dump sites in the south. He owns two trucks and a tow head. The trucks are used to collect the waste metals and batteries. These are stored on site for placing in large container truck for transportation to Escuintla, Guatemala, a 20-hour drive from Red Bank. A portion of the highway connecting Belize and Guatemala from « The Dump » or the Big Falls Junction is not yet paved. This prohibits large vehicles from using this road; therefore, he goes via the Western Border. His trip is 20 hours, and completion of the Belize/Guatemala southern road would cut his trip by three to four hours.

He transports 60 tons of mostly metals once every 20 days to Guatemala. He has 4 full time employees (two drivers and two helpers) and sometimes hires another when needed. He also has his daughter who helps to run the business.

Table 4: Prices paid by Southern Metal Recycling

Material	Price (BZ\$)
Aluminium	\$0.50 to \$0.60 (\$0.60 for solid aluminium) / lb
Plastic Bottles (Soft Drink)	*
Copper	Not being recycled at this time
Bronze	
Glass Bottles (Soft Drink)	Local products that the company does not recycle
Glass Bottles (Beer)	
Glass Bottles (Rum)	
Glass Bottles (Smirnoff)	
Iron	\$0.07/Lb
Metals from cans	\$0.07/lb
Metals from zinc roofing	\$0.03/lb
Batteries	Based on size, from \$8.00 to \$15.00 each
HDPE**	** no one recycling these at the moment
Cardboard/paper**	Claims that Caribbean Paper was recycling paper and cardboard but sending to El Salvador

¹⁶ Their presence was mentioned at both the Dangriga and Placencia dump sites by the recyclers present, although none were actually interviewed.

¹⁷ See project files for complete interview.

3.2.4 Toledo District

In Toledo District the dumpsites at Punta Gorda and San Antonio were visited and consultations were held with local authority representatives in both localities.

In Punta Gorda, the dump site authorised by the municipality receives waste from the town and from 5-10 villages¹⁸ in the Toledo District. There was no permanent presence of recyclers observed at the dump site, nor evidence of recyclable materials been sorted and stored separately. According to the municipal authorities (itinerant) buyers come from Guatemala at irregular intervals to recover materials from the dump site.

Figure 7: Dump site at Punta Gorda, Toledo district



The dump site of San Antonio is located on the outskirts of the village. Here also, no evidence of recyclers was noticed nor of materials being recovered. This was confirmed by the *Alcalde* of the village.

¹⁸ Including: Jacinto Ville, Yemeri Grove, San Felipe, Santa Ana, Eldridge Ville and Forest Home.

Figure 8: State of open dump in San Antonio village (Abril 2015).



As such, no informal recyclers would be affected by the proposed activities of the Master Plan foreseen for Punta Gorda Town.

3.3 Analysis

Based on the descriptions presented in the previous section, a comprehensive analysis is given in this section of the recycling activities encountered in the nine dump sites that were visited.

An overview of the activity of informal recyclers is given in Table 5. Four main characteristics can be noted regarding the recycling activities observed at the different locations:

- **Permanent (daily) presence¹⁹** of a total of 33 informal recyclers can be observed at 5 dumpsites, with a clear distinction between the northern corridor districts (31 recyclers) and the southern corridor districts (2 recyclers); these would receive the highest priority in terms of compensation for possible loss of income.
- **Temporary presence** of an additional 60-68 informal recyclers was found in 6 of the dumpsites, with a varying degree of irregular presence; these would be considered as a medium priority in terms of compensation for possible loss of income, with the following order of priority:
 - **Part-time** (2 or 3 days a week) but regular presence at the dump site, such as the case of Corozal Free Zone Dump site (11 persons) and Dangriga dump site in Stann Creek district (10 persons).
 - **Seasonal variance** with increased presence during high tourism season (Dec-May), such as the case of Placencia (6-8 persons)
 - **Material bounded variance**, as is the case of groups of women who visit the dump sites to collect (only) clothing and shoes for commercialization or own use; such as the reported group of 10 women in Orange Walk and 10 women who visit the Dangriga and Placencia dump sites.
- **Active participation in recycling activities** of the watchman at five dump sites. The watchman is paid by the local authority responsible for the dump site, and coordinates the disposal by the waste collection trucks, but also actively recycles as a supplement to his municipal salary. This category would receive the lowest priority as it would be the responsibility of the municipality to attend to the issue of possible loss of income.
- **No presence of recycler**, although buyers would come directly to the dump site to recover materials at irregular intervals as is the case of Punta Gorda dump site. The buyers would not be considered as possible beneficiaries of the SIF.

In summary, an estimated total of 100 recyclers were reported as being active at the different dump sites, although only one third (33 recyclers) are permanently involved and depend solely on the recovery of materials as their source of income. Of the two-third that are temporary in their presence, 40-48 recyclers could be considered to have some direct relation to the dump sites for providing a principal source of income, whilst the link to the dump sites of the final group of 20 or so persons who recover clothing and shoes, could be seen as insignificant.

¹⁹ From Monday to Friday at least 6 hours per day.

Table 5: Overview of activity of informal recyclers at dumpsites in northern and southern corridors.

#	Location of dumpsite	Persons active at dumpsite			Type of materials recovered	Presence of buyers of recyclable materials
		Permanently ¹		Temporary		
		Performing 'technical' operations	Recovering recyclable materials	Recovering recyclable materials		
1.	Corozal Town, Corozal District	Watchman ²	8 persons	10-15 persons ³	Metals, plastic, broken glass, glass bottles per unit, batteries	Buyers from Mexico (weekly) and Guatemala (monthly) come to dumpsites to buy different materials
2.	Consejo / Paraiso (Villages) Corozal District	None	3 persons			
3.	Corozal Free Zone Dump site	None	0	11 persons ⁴		
4.	Orange Walk Town, Orange Walk District	Watchman	20 persons	10 persons ⁵		
5.	Dangriga, Stann Creek District	Watchman	1 person	20 persons ⁶		
6.	Placencia (Village), Stann Creek District	Watchman	1 person	6-8 persons ⁷		
7.	Independence (Village), Stann Creek District	Watchman	0	3-4 persons		
8.	Punta Gorda, Toledo District	None	No permanent presence of recyclers, reportedly buyers come from Guatemala at irregular intervals to recover materials from the dump site			
9.	San Antonio (Village), Toledo District	None	None found		None	None
Total		5	33	60-68		
Notes:						
1. Monday to Friday on a full time basis during the day.						
2. The watchman also performs sorting activities, as an additional income source to the salary received from the municipality.						
3. Include 1 underage girl.						
4. Reportedly three times a week on a regular basis.						
5. Women who come at irregular intervals to collect clothing for commercialization.						
6. 10 persons reportedly twice a week (7:00 am -14:00 pm) on a regular basis; 10 others come at irregular intervals to collect clothing for commercialization.						
7. Seasonal recyclers, some are reportedly from Guatemala and Honduras						

Source: Field visits to the different dumpsite during period April – September 2015

The *permanent* recyclers are predominantly male, of Mestizo/Hispanic ethnicity, varying in age between 19-65 years and with (at most) a primary school education completed. Of the *female permanent* recyclers all of these work together with their partner / husband.

Table 6 provides an overview of the *permanent recyclers*.

Table 6: Characteristics of recyclers working permanently at the dump sites

Location of dumpsite	Number of Males	Number of females	Age range years	Ethnicity	Highest level of education completed
Corozal Town, Corozal District	5	3	19-55 (male) 23-45 (female)	Mestizo	Primary school
Consejo / Paraiso (Villages) Corozal District	2	1		Mestizo	Primary school
Corozal Free Zone Dump site	0	0			
Orange Walk Town, Orange Walk District	18	2		Mestizo	Primary school
Dangriga, Stann Creek District	1	0	32	Hispanic/Mestizo	Primary school
Placencia (Village), Stann Creek District	1		43	Creole Belizean	Primary school
Independence (Village), Stann Creek District	0	0			
Punta Gorda, Toledo District	None	None			
San Antonio (Village), Toledo District	None	None			
Total	27	6			

Note: The watchmen contracted by the respective town and villages councils are not included.

Of those recyclers that are permanently active at the dump sites, those that completed the *recyclers census form* all indicated that they have no additional income source other than the income obtained through the commercialization of the recovered materials. The range of monthly income reported was between BZD \$400 – 900, which in most cases was reported as being sufficient to meet the needs of the recyclers.

Table 7: Range of monthly income (BZD \$) from commercialization of recyclables reported by recyclers.

Location of dumpsite	# of recyclers ¹ who would lose their income with the operation of the transfer station and closing of the dumpsite	Range of monthly income ² (BZD \$)	# who indicated that 'working at the site give them enough money to meet their needs'
Corozal Town, Corozal District	8	600-900	4/8
Consejo / Paraiso (Villages) Corozal District	3	Not available	Not available
Corozal Free Zone dump site	0	700-800 ³	1/1
Orange Walk Town, Orange Walk District	20 ⁴	500-600	2/2
Dangriga, Stann Creek District	1 ⁴	400-500	1/1
Placencia (Village), Stann Creek District	1	500-600	1/1
Independence (Village), Stann Creek District	0	No temporary recyclers interviewed	
Punta Gorda, Toledo District	0	No evidence of recyclers	
San Antonio (Village), Toledo District	0		
Total	33	\$400-900	

Notes:

1. Includes only recyclers working permanently on each dump site
2. The wage of the watchmen contracted by the respective town and villages councils is not included.
3. Wage of interviewed recycler onsite that works there irregularly.
4. Not all were willing to complete the Recyclers Census form.

The table below shows an overview of the need to activate resettlement activities due to remediation of dump sites.

Table 8: Overview of need to activate *resettlement activities* due to remediation of dump sites

Location of dumpsite	Number of non-permanent dwellings on site ¹	Need to activate <i>resettlement activities</i>
Corozal Town, Corozal District	None	No
Consejo / Paraiso (Villages) Corozal District	None	No
Corozal Free Zone dump site	None	No
Orange Walk Town, Orange Walk District	2 make shift shacks	No
Dangriga, Stann Creek District	None	No
Placencia (Village), Stann Creek District	2 make shift shacks	No
Independence (Village), Stann Creek District	None	No
Punta Gorda, Toledo District	None	No
San Antonio (Village), Toledo District	None	No
Note: The watchmen contracted by the respective town and villages councils are not included.		
1. No permanent dwellings were found on any of the sites.		

3.4 ELIGIBILITY CRITERIA AND CUT-OFF DATE

3.4.1 Eligibility Criteria

The key criteria of eligibility for inclusion as a beneficiary of each of the individual Social Inclusion Plans²⁰ to be prepared as a result of this Social Inclusion Framework are:

- 1) verified to be working at one of the affected sites at the time of the cut-off Date ²¹ (as verified by inclusion in the baseline census);
- 2) for how long²² the person has been working at the affected sites.
- 3) whether the person has been working permanently or temporarily at the affected sites.

Regarding the eligibility criteria, the following would still need to be clarified:

- 1.a) What is the definition of 'having worked at one of the affected sites'? Would this apply initially only to those permanently active at the site? Or would it also include those *temporarily* active at the sites?

²⁰ As mentioned previously, a site specific SIP will need to be prepared, when each of the proposed dump sites will be closed and remediated. The same criteria of eligibility should be used for each of the individual SIPs.

²¹ Only those persons that would have worked at the one of the affected dump sites would be entitled to be included as beneficiary of the SIF, whereby a possible distinction could be made between permanent and temporary recyclers.

²² In order to be entitled to be included as a beneficiary of the SIF, the recycler will need to have worked a minimum period at the affected dump site. This period will need to be defined as part of the activities of Phase 1: Consultation processes with the recyclers at the dump sites, of the SIF.

3.4.2 Cut-off Date

The “Cut-off Date” is an officially established deadline for determining who is eligible under a Social Inclusion Plan – normally at the conclusion of the initial baseline census for that specific Social Inclusion Plan. It is critical that all eligible persons be registered before this date. The clear establishment of the deadline is critical to avoid confusion over eligibility, as newcomers may attempt to enter the list in search of potential benefits.

It is important that the Cut-off Date is made public via appropriate dissemination strategies

It is also recommended to establish and properly disseminate a mechanism for resolving any outstanding disputes or claims regarding eligibility that may arise subsequent to the establishment of the official list of eligible individuals. This function may be included as part of the Grievance Mechanism.

The cut-off date for eligibility for each individual Social Inclusion Plan for each specific dumpsite will need to be established by SWaMA together with the sector specialists from the IADB. It is recommended that this cut-off date should immediately follow the census for each site a plan is prepared for.

3.5 Legal and Policy Framework

3.5.1 Applicable Belizean Laws

Although the current legal framework in Belize does not promote recycling, the Solid Waste Management Policy and Strategy and updated the National Solid Waste Management Plan developed in 2015 does include the development of “3Rs” targets and strategies. As such it would be important to include in these documents incentives that support the development of a recycler’s network throughout the country.

Specifically:

- ***Income restoration.*** Belizean law has no provision for compensating lost income.
- ***Informality.*** Informal income activities are not explicitly recognized under Belizean law.
- ***Procedural requirements.*** There is no specific reference in Belizean law to ‘involuntary resettlement’, even with regard to land or physical property. There is no requirement to prepare a formal Resettlement Plan nor to undertake any of the component activities of a Plan, such as a census, socio-economic survey, monitoring or reporting.
- ***Consultation and grievance redress.*** There is no specific legislation in Belize on grievance redress.
- ***Disclosure.*** There is no specific legislation in Belize on disclosure of documents.

3.5.2 Applicable IDB Policy

In the event a loan agreement would be signed by the Government of Belize (GOB) and IDB, the IDB policy OP-710, on Involuntary Resettlement would apply to the Project financed by the loan²³. OP-710, on Involuntary Resettlement (1998), applies to all situations in which people are physically displaced or lose their source of livelihood (fisheries, agricultural land, employment, business outlets, etc.) as a result of land acquisition. The policy applies, for example, in situations in which people lose agricultural land or small businesses, whether or not their housing is not affected. The basic considerations of the Policy also apply where people are temporarily displaced.

The key principles of the Policy are:

²³ As would OP-763 – Gender Policy and OP-765 – Indigenous Peoples Policy.

- Avoid or minimize the need for resettlement. This requires that serious consideration be given to alternatives, such as the relocation of a dam axle or lower reservoir levels in the case of hydropower projects, or a narrower right-of-way and/or re-routing through less populated areas in the case of highway projects. This principle should, however, balance considerations of safety for people living in the vicinity of the project.
- Ensure that the affected population can achieve an equivalent or improved standard of living within a reasonable time. The affected population should be given access to land, natural resources, housing and infrastructure of a level at least equivalent to that which they previously enjoyed, allowing them to recover or improve their income levels within a reasonable period. They should be provided with an acceptable level of services, including potable water, drainage, sanitation and community infrastructure, regardless of their previous conditions.
- Fully compensate all transitional losses. These include all legal costs, transport costs and loss of income resulting from displacement.
- Minimize the disruption of social networks and economic opportunities. As far as possible the affected population should be encouraged to maintain their social networks. This can be achieved through close consultation, by resettling the affected population as a PRI Environmental and Social Guidance December 2001 1 Private Sector Department Inter-American Development Bank group, as near as possible to their original location, and by timing the move to coincide with the most appropriate times in the school year and/or agricultural cycle.
- The project should provide opportunities for development. Wherever possible, the affected population should be the first to benefit from the opportunities provided by the project. This can be achieved by giving them preference in employment, and if necessary training, and by offering opportunities for self-employment. Examples would include service contracts for local labour, or the provision of parking and basic facilities for roadside vendors affected by highway projects.
- Vulnerable Groups. It is particularly important to ensure that vulnerable groups are adequately protected. They include poor ethnic minorities, such as indigenous peoples, landless rural poor, and small farmers or squatters who lack full legal title to the land they use or occupy. The Bank will only support resettlement of traditional land-based indigenous peoples if it can be shown that resettlement will result in direct benefits to them. This requires that their customary rights must be recognized and fully compensated, they must be offered a suitable land-for-land option, and they must give their informed consent to the resettlement proposals. Special attention should be given to those sectors of the population that are at risk of impoverishment or that may have special difficulty adjusting to the disruption caused by displacement. They include the elderly, the physically handicapped and female heads of household. In addition, the compensation and rehabilitation measures should ensure that the rights of partners living in common-law unions and their children are protected if the couple separate or if one of the partners dies.

Key requirements of the Policy include:

Preparation of a Plan. When displacement is unavoidable, a Resettlement Plan must be prepared to ensure that the affected people receive fair and adequate compensation and rehabilitation.

Dimension. When the number of people to be resettled is very small, the affected group is not vulnerable, or the institutional setting and the marketplace offer reasonable opportunities for the replacement of assets or income, and intangible factors are not significant, a resettlement plan as such may not need to be prepared, and relocation addressed instead prior to the project through mutually agreed contractual covenants.

Compensation. Appropriate compensation and rehabilitation options must provide a fair replacement value for assets lost, and the necessary means to restore subsistence and income, to reconstruct social networks and compensate for transitional hardships.

Livelihoods. OP-710 may be (and is, in the context of current global good practice) broadly interpreted to cover both physical and economic displacement, including impacts on income and means of livelihood. Specifically, livelihoods should be restored to the pre-resettlement standard.

Consultation. Preparation of a resettlement plan should include consultations, carried out in a timely and socio-culturally appropriate manner, with a representative cross-section of the displaced and host communities, to begin in the design phase and continue throughout the execution and monitoring of the plan.

Indigenous Communities. Indigenous communities may only be affected where: (1) resettlement will result in direct benefits to the affected community relative to their prior situation; (2) customary rights are fully recognized and fairly compensated; (3) compensation options include land-based resettlement; and (4) affected persons have given their informed consent to the resettlement and compensation measures.

Vulnerability. Care should be taken to identify the most vulnerable subgroups and ensure that their interests are adequately represented in this process.

Monitoring and Evaluation. The resettlement component must be covered in the progress reports on the overall project. Monitoring and evaluation requirements and their timing must be specified in the resettlement plan and loan agreement.

Adherence to highest standard. Many solid waste projects are designated Environmental Assessment (EA) category “A”, which implies the highest environmental and/or social impacts, and thus requires the undertaking of a Social Assessment of any relevant livelihoods activities and adherence to the highest possible standards of impact management and mitigation under the Policy.

In cases in which Belizean law and practice differ from IDB policy, special Project-specific arrangements have been developed under this plan to ensure compliance with the higher standard. IDB Specialists will provide technical assistance and monitoring as necessary to ensure that the project fully complies with the requirements of both Belizean Law and IDB policy.

3.5.3 Gap Analysis

Nothing in Belizean Law contradicts the requirements of the IDB Policy; the latter merely specifies in greater detail points on which national Law is either mute or implicitly aligned with the Bank OP.

With specific regard to the Environmental Impact Assessment (EIA) requirements, the Belize Environmental Protection Act (EPA), Chapter 328, Revised Edition (2003), showing the Subsidiary Laws as of 31 October, 2003, states in Schedule I (Regulation 7) that a full Environmental Impact Assessment (EIA) shall be completed for any project, program or activity that includes an “installation designed solely for the permanent storage or final disposal of any waste.” In “Screening of Undertakings” (18:1), the Act states that:

During the course of an environmental impact assessment, the developer shall provide an opportunity for meetings between the developer and interested members of the public,

especially within or immediately adjacent to the geographical area of the proposed undertaking, in order ... to provide information concerning the proposed undertaking to the people whose environment may be affected by the undertaking...

In accordance with the DOE, however, it is understood that this last condition applies only to the construction of new sanitary landfills and not to the closing of open dump sites or the construction of transfer stations.

3.5.4 Proposed Gap filling Measures

Project activities include construction of several transfer stations to receive collected solid waste that is currently disposed of at the dumpsites where informal recyclers recover recyclable materials for sale to intermediaries. The redirection of this waste to new locations will result in a significant if not total reduction in the amount of recyclable materials arriving at current dumpsites, and thus a serious impact on the income generating activities of those recovering those materials. Under OP-710, this qualifies as 'loss of access to means of production'. Furthermore, with the remediation of open dumps after the transfer stations have become operational, not only will new materials stop arriving at the dumpsites, but access to the materials already there will be limited, resulting in still further losses in access to the means of production.

Table 9: Comparison of Belizean Law and IDB Policy

Issue	Belizean Law	IDB Policy (OP-710)	Recommended Measures
Economic Displacement (loss of access to income and means of livelihood)	Belizean Law has no provision for compensating lost income	Impoverishment Risk Analysis: When the baseline information indicates that a significant number of the persons to be resettled belong to marginal or low-income groups, special consideration will be given to the risks of impoverishment to which they may be exposed as a result of resettlement, which includes: - loss of access to means of production - loss of employment	Provide income generating opportunities: i. Same type of activity which would not require additional training ii. Similar type of activity which would require additional training and capacity building iii. Other type of activity with same level of labour skills
Physical Displacement	There is no specific reference in Belizean Law to 'involuntary resettlement', even with regard to land or physical property. There is no requirement to prepare a formal Resettlement Plan nor to undertake any of the component activities of a Plan, such as a census, socio-economic survey, monitoring or reporting.	When the number of people to be resettled is very small, a resettlement plan as such may not need to be prepared. In such cases it may be possible to address relocation prior to project advancement through mutually agreed contractual covenants	Prepare relocation plan in consultation with affected persons in accordance with mutually agreed contractual covenants

Remediation of open dumpsites may further result in the removal of dwellings of persons currently living on those sites and reallocation of those persons to similar or improved conditions with access to similar or improved income-generating opportunities.

Timeliness. A preliminary resettlement plan must be prepared as part of the Environmental Assessment (EA). It must undergo a process of meaningful consultation with the affected population, and must be available as part of the EA, prior to the Analysis Mission. It must include sufficient information to be evaluated along with other project components. At a minimum, it must include:

- evidence that appropriate measures have been taken to prevent new settlements in the area subject to resettlement;
- a tentative cut-off date for compensation eligibility;
- an estimate of the number of people to be resettled based on sufficiently reliable data;
- a definition of the various options to be made available under the compensation and rehabilitation package;
- an estimate of the number of people who will be eligible for each option;
- a preliminary budget and schedule of execution;
- a diagnosis of the viability of the regulatory and institutional framework, identifying issues to be resolved; and
- evidence of consultation with the affected populations. The plan will be summarized in the Environmental and Social Impact Report (ESIR).

3.6 CONSULTATION AND DISCLOSURE

3.6.1 Consultation

During the visits to the dump sites in the four districts of the Northern and Southern corridors initial consultations have been held with those recyclers present at each of the dump sites, in the understanding that they could be potentially affected by the activities of the Project.

The consultation process has included:

1. Initial (unannounced) visits during April-September 2015²⁴ to dump sites to identify presence of informal recyclers and establish the number of recyclers who are permanently active at the site and those who frequent the sites on a temporary and/or irregular basis.
2. One consultation visit during Oct 2015 to each of the sites, where recyclers were identified²⁵, to conduct general consultation²⁶ to:
 - a) Understand the current dynamics for recovery of materials and the characteristics of the recyclers groups active at each site.
 - b) Assess knowledge on the Solid Waste Master Plan activities and similar projects in Belize (Transfer station at Mile 3).
 - c) Assess impact the closing of dump site would have on access to source of income.
 - d) Assess the willingness to work in facilities similar to the Transfer Station at Mile 3, and motivation to do so.

²⁴ Each site was visited at least once during this period.

²⁵ No consultation visit was conducted to the dump sites at San Antonio and Punta Gorda in Toledo district as no permanent recyclers were found during the first visits. Also no consultation visit was undertaken at the Independence dump site because there were no recyclers present when the site was visited during Oct 2015.

²⁶ The recyclers census reports of the different dump sites where permanent recyclers were identified are available in the project files.

3. Application of recyclers census format²⁷ to those permanent recyclers²⁸ present at the dump sites who were willing to participate in the individual interviews.

Future activities²⁹ which would need to be undertaken, include:

- 1) Application of recyclers census format to those permanent recyclers who are active at each of the dump sites, who were not present during the first consultation visit and/or initially not willing to fill out the format.
- 2) Application of recyclers census format to those temporary recyclers who are not permanently present at each of the dump sites.
- 3) Identifying recyclers to be benefited according to the eligibility criteria and pairing them with the inclusion options according to their level of "priority in terms of compensation for possible loss of income" as described in section 3.3.
- 4) Prepare a draft SIP for each dump site based on the principals set-out in this Social Inclusion Framework.
- 5) Based on the initial consultations, discuss the initial draft of the corresponding SIP at each of the dump sites with the active recyclers (both permanent and temporary) before finalization and public disclosure.
- 6) Public disclosure of initial draft and a final consultation held with the recyclers.
- 7) Preparation and disclosure of final SIP, based on the input from the persons consulted.
- 8) Conduct feedback session with the recyclers to show and discuss: (i) which of their suggestions were incorporated and how; and (ii) which were not incorporated and why.

3.6.2 Disclosure

This version will have public disclosure, in English, both online on the IDB and at GOB websites and in hardcopy at the relevant site offices. A separate hardcopy will also be delivered to any representative organizations designated by the recyclers.

Visits Oct 2015

In general, the *permanent* recyclers at the different sites showed willingness to cooperate, awareness and interest in the project activities, especially in the Corozal Town dump site.

When consulted on the problems faced working at each of the specific sites the main issues raised included:

- There is only limited time to sort because waste is burnt to control pests.
- Lack of shelter, inclement weather conditions, rain and sunlight
- Lack of transportation to site
- Lack of availability of water on site and possibility to store food or have access to food
- The entire site is unsanitary, no showers are present
- Not enough material reaches the site because there is too much illegal dumping
- Lack of material at the site, because of the seasonal fluctuation and poor (perceived) collection services.

²⁷ The census and baseline survey form applied to those present at the dumpsite is included in Annex 1.

²⁸ Thirteen (13) permanent recyclers of the 33 identified completed the forms.

²⁹ Under the understanding that they would be subject to the approval of the loan related to the Project.

3.7 Grievance Mechanism

Currently no official grievance mechanism exists between the recyclers at each of the dump sites and the local authorities responsible for the operation and management of the sites. The presence of recyclers at the dump sites is not restricted nor opposed.

At five of the sites there is a watchman present, employed by the local authority. Any disputes or grievances regarding the presence of recyclers and activities related to recycling would be done with the watchman. This appears to be done in harmony; there is no restriction to access to the dump sites for recyclers and in fact the watchman in most cases participates actively in the recycling activities.

With the development of the Project³⁰ and the individual SIP's taking concrete form, it will be of essence to formalize the grievance procedure and include it in reporting, in order to ensure that it is receiving and addressing in a timely fashion any concerns that the recyclers may have regarding the Project. This should initially fall under the responsibility of SWaMA, whereby close coordination with the respective local authorities is recommended. This formalization process should preferably start after the cut-off dates regarding the beneficiaries of the SIPs at each site have been established, and be effective until the dump sites are closed and remediated.

It should include a dispute resolution mechanism designed to arbitrate any conflicts in an impartial manner. A summary of all grievances recorded and corresponding measures taken to resolve them should be made public on a regular basis and included in regular Project reporting.

The Project shall establish and address a registry of grievances, and specifically:

- a designated staff person (Grievance Officer) stationed at each of the municipalities³¹ where there is a dump site, with clearly defined and well-disseminated office hours
- a dedicated phone line, with regularly staffed hours and available voicemail box
- a page on the SWaMA website explaining the mechanism and allowing for the online submission of grievances
- an email address
- a mailing address or P.O. box

All of these channels of communication shall be duly posted at the sites and disseminated among the recyclers.

Affected persons will be able to submit grievances directly to their local designated Grievance Officer. All grievances shall be recorded in a register, along with an assigned case number and the following information:

- description of the grievance
- date of receipt acknowledgement returned to the complainant
- description of actions taken (investigation, corrective measures)
- date of resolution and closure/provision of feedback to the complainant

³⁰ The Project related to the corresponding IADB loan.

³¹ This could fall under the municipality initially, with reporting to BSWaMA and once the TS have become operational and recyclers have been commenced their activities in the TS, this would fall directly under BSWaMA.

A sample Grievance Form is found in Annex 2.

The recommended process for addressing grievances is as follows:

- The Project shall send a written acknowledgement of reception of the grievance within seven (7) days.
- The Project shall then make all reasonable efforts to address the grievance and send the complainant a written notice of the proposed corrective action and follow-up measures within 25 days of acknowledgement of grievance.
- If the Project is unable to address the grievance or if no action is required, the Project will provide a clear explanation of why no action was taken. This response will also contain an explanation of how the person(s) who submitted the grievance may proceed in case they are not satisfied with the outcome.
- If, at the end of the process, the complainant is not satisfied, they may pursue their case through the formal court system.

4 PROPOSED UPGRADING ACTIONS

4.1 Introduction

The implementation of new transfer stations in the northern and southern corridor will result in the ceasing of recyclables going to the dump sites located in this corridor. As discussed before, this will directly affect the access to a source of income and lead to loss of income for those working on the dump sites either on a permanent or on a temporary basis. The initial consultations done at the dump sites indicate that at least 33 persons who operate permanently on these six sites will be affected³², and in potential up to 100 persons of those operating on a temporary basis are included. These do not include the watchmen³³ who work at the dumpsites as they are employed by the local authorities responsible for the dump site and it is assumed the authorities will furnish alternative employment in case it is needed.

This part of the Social Inclusion Framework examines the compensation entitlements and the options for mitigating these negatives impacts and potential loss of income. As indicated in Table 10, the recommended measures should focus (where possible) on providing (alternative) income generating opportunities that are:

- a) Same type of activity which would not require additional training
- b) Similar type of activity which would require additional training and capacity building
- c) Other type of activity with same level of labour skills, which might require training and capacity building

Table 10: Compensation entitlements matrix.

	Category	Eligibility Criteria	Impacts	Mitigation/Compensation Options
1.	Loss of access to means of production	1) verified to be working at one of the affected sites at the time of the cut-off Date (as verified by inclusion in the Baseline Census)	Loss of income for recyclers due to reduction in (or elimination of) access to recyclable materials at the dumpsite	<ul style="list-style-type: none"> Income-generating opportunities at transfer stations constructed in the same municipality Income-generating opportunities in activities that require a similar skill level (construction industry, harvesting, domestic cleaning and housekeeping services, restaurant and housekeeping services in the tourism and hotel sector, etc.)
2.	'involuntary resettlement'	1) having a <i>dwelling</i> at one of the affected sites before the cut-off data (as verified by inclusion in the baseline census)	Loss of dwelling because of remediation of dump site and in certain cases also due to the construction of the new transfer station on the current dumpsite location	<ul style="list-style-type: none"> Dwelling of similar conditions with access to basic necessities (drinking water, electricity, sanitary facilities) within a reasonable traveling distance from future income generating activity

³² Once the terms of the corresponding IADB loan have established, this number should be modified in accordance with the actual number of dumpsites and transfer stations to be included in the loan.

³³ Those watchmen that are performing recycling activities they will be included within the affected population, but not as the one with highest priority of compensation since they won't lose most of their income.

In the next section an overview of the employment opportunities that will be generated as a result of the proposed activities in the Solid Waste Master Plan will be set out and assessed to what extent these could incorporate those working at the dump sites currently.

4.2 Matching affected recyclers with potential employment opportunities

The implementation of the activities foreseen in the *Solid Waste Master Plan for Emerging Tourism Areas*³⁴ will not only strive to improve the living conditions, health of the inhabitants and their surrounding environment in the two corridors, but it will also directly and indirectly result in the generation of new employment opportunities.

Direct opportunities will arise during the construction phase and operation phase of the different components of the Master Plan, whilst indirect employment opportunities in the areas of communication, training, supervision, education and awareness raising can be identified.

Personnel of varying skill levels will be required to operate the different solid waste management facilities foreseen in the Master Plan and the logistical activities to transport the different solid waste streams between the facilities. Potentially, there exist the possibility that a number of these employment opportunities could be filled by some of those currently working at the dump sites that will be closed, and result in a loss of income for those recyclers.

This paragraph will present, per component of the proposed solid waste management system, the number of labourers required for operation in accordance with their competency level. The number of persons required during the construction of the transfer stations will not be estimated.

4.2.1 Employment opportunities generated at the Transfer stations

A work crew of six persons (see table below) is proposed for the operation of each of the five transfer stations.

This means that when the five transfer stations become operational, potentially 30 vacancies will be created, 12 in the Northern Corridor districts and 18 in the Southern Corridor districts. As for the equipment used at the transfer stations, it is supposed that the maintenance and repair activities of the equipment will be outsourced and as such are not included as *directly* generated employment, but rather *indirectly* generated.

Table 11: Proposed personnel required for operating the transfer station (number and function)

Number of employees	PERSONNEL	Skill level	Monthly wage (USD)
1	Foreman	Medium	800,00
2	Gate keeper	Low	400,00
1	Machine operator	Low	500,00
2	Unskilled labourer		400,00

³⁴ Because this SIF is only relates to the IADB loan, only a part of the SW Master Plan will considered, namely those infrastructures that will be financed by the IADB loan.

Table 12: Potential number of jobs created for operating the transfer stations (2019-2040)

Location of Transfer Station	Skilled labourers			Unskilled labourers	Total employment opportunities
	High skill level	Medium skill level	Low skill level		
Transfer Station Corozal Town, Corozal District	0	1	3	2	6
Transfer Station Orange Walk Town, Orange Walk District	0	1	3	2	6
Transfer Station Dangriga, Stann Creek District	0	1	3	2	6
Transfer Station Independence, Stann Creek District	0	1	3	2	6
Transfer Station Punta Gorda, Toledo District	0	1	3	2	6
Number of jobs created	0	5	15	10	30

In addition, the design of the transfer station will allow recyclers to extract and recover recyclable materials from the waste that is brought to the transfer station. It is estimated that 8-10 recyclers will be able to operate during the interval that the waste is deposited and loaded into the trash trailer. A total of 40-50 income earning opportunities will be created through this mechanism.

Thus an initial assessment indicates that 70-80 employment opportunities could be created as a result of those activities from the solid waste master plan that are included in the IADB loan, that potentially require skill levels available within the recycler group or attainable with training and capacity building.

The table below compare the number of persons active on a permanent basis at the dumpsites recovering recyclable materials with the employment opportunities that would be created at the 5 transfer stations in the districts in the NC and SC.

Table 13: Comparison of the number of permanent recyclers who would lose their source of income versus number of employment opportunities created at the 5 transfer stations in the NC and SC

Location	Persons active on a permanent basis at dumpsites recovering recyclable materials	Employment opportunities at Transfer Stations ¹		
		Low skill level	Unskilled labourers	Total
Corozal District	11	3	12	15
Orange Walk District	20	3	12	15
Stann Creek District	2	6	24	30
Toledo District	0	3	12	15
Total	33	15	60	75
Notes: 1. Including employment opportunities to recover (and commercialize) recyclable materials from the incoming waste stream at the transfer stations				

In general terms, the number of potential employment opportunities generated (75) would accommodate for the number of persons (33) active on a permanent basis that would lose their income source. Comparing more closely per district, for all districts except Orange Walk there would potentially be a surplus of job generated. In the case of Orange Walk there would still be a need to create 5 additional

employment opportunities. These could be satisfied by the Transfer Station at Corozal Town. In the process, the distance from Orange Walk to Corozal Town must be considered.

Table 14: Number of recyclers active on a temporary basis who would lose their source of income

Location	Persons active on a temporary basis at dumpsites recovering recyclable materials
Corozal District	26
Orange Walk District	10
Stann Creek District	31
Toledo District	0
Total	67

Furthermore, 67 persons were identified that operate at the dumpsites on a temporary basis. During the consultation process it will need to be determined if and how many of these persons would be eligible for compensation in the form of alternative employment. Because not all the job opportunities generated at the transfer stations would be filled by those working currently permanently at the dump sites, a number of vacancies (max 42) would still be available for those working on a temporary basis on the dump sites.

In addition, income-generating opportunities in activities that require a similar skill level would need to be explored in more detail during the process. The table below gives an initial indication alternative possibilities.

Table 15: Alternative job opportunities for recyclers that work on a temporary basis on the dumpsites

Location	Alternative job opportunities (that require a similar skill level or minimum training and capacity building)
Corozal District	<ul style="list-style-type: none"> Domestic cleaning and housekeeping services (Corozal Town) Restaurant and housekeeping services in the tourism and hotel sector (subdivision resorts)
Orange Walk District	<ul style="list-style-type: none"> Harvesting (sugar cane plantations) Domestic cleaning and housekeeping services (Orange Walk Town)
Stann Creek District	<ul style="list-style-type: none"> Construction industry (construction of subdivision resorts) Harvesting (banana and citrus fruit plantations) Domestic cleaning and housekeeping services (Dangriga, Placencia, Independence) Restaurant and housekeeping services in the tourism and hotel sector (subdivision resorts)
Toledo District	<ul style="list-style-type: none"> Domestic cleaning and housekeeping services (Punta Gorda)

4.3 Activities of SIF

The timetable below (Figure 9) provides the general framework of the activities for the forthcoming six years until the proposed system is fully operational and the facilities are receiving and processing the collected waste. The activities in blue indicate the integration of the SIF in general terms.

The activities fall into three main phases:

- **Phase 1:** Consultation processes with the recyclers at the dump sites

- **Phase 2:** Training + capacity and organisation building recyclers
- **Phase 3:** Recyclers integrated in operation of TS's

Figure 9: General framework of activities for implementation of SWM and integration of SPF.

Activity	Corridor	2016	2017	2018	2019	2020	2021
Loan procedures + tendering	NC+SC						
Phase 1: Consultation processes recyclers	NC+SC						
Phase 2: Training + capacity and organisation building recyclers	NC+SC						
Transfer stations construction	NC+SC						
Landfills + transfer stations operational to receive waste from Agglomerates	NC+SC						
Phase 3: Recyclers integrated in operation of TS's	NC+SC						
Estimated status of dumpsites	NC+SC		receiving waste	receiving waste	receiving less waste	receiving no waste	closed / remediation
Estimated status of income recyclers	NC+SC		no loss of income				
Institutional Strengthening SWaMA	NC+SC						

4.3.1 Phase 1: Consultation processes with the recyclers at the dump sites

Phase 1 is expected to run in parallel to the loan procedures and tendering for the design and construction of the transfer stations. This phase should focus on the consultation process with all the recyclers present at the different dump sites, where the cut-off date for eligibility should strive to be prior to commencement of construction of the transfer stations. During this phase it is essential:

- To define which dump sites are included in the SIF and for which an individual SIP needs to be prepared.
- To define those recyclers affected in dumpsites that will not be closed, but that will be affected by the construction of the Transfer Stations, as is the case for Paraiso Village,
- To define the eligibility criteria of the recyclers to be included in the SIF and as such would be entitled to compensation and be beneficiaries of mitigation measures.
- To establish a list of recyclers who are eligible for compensation and would be beneficiaries of mitigation measures.
- To define which recyclers would work at which transfer stations, and for which educational programs for their children would be required³⁵.
- To define the minimum qualifications and skills required for the different functions in the transfer stations.
- To conduct a training needs assessment of the recyclers for them to be able take on the (operational) functions in the TS's.
- To prepare a training program to train the recyclers for them to be able take on the (operational) functions in the TS's.
- To define the operational and financial model for the recyclers to operate within the TS's.
- Strengthen SWaMA with at least one social officer that would be responsible to accompany the implementation of the Social Inclusion Framework and the site specific SIPs and take a lead role in their implementation.

It is important to develop the process in this phase in accordance with Belize Legislation on social aspects.

³⁶

³⁵ No children will be allowed on the transfer station sites.

³⁶ See Annex 3 for most important references.

During this phase it is assumed that the dump sites remain open and continue to receive waste and as such no loss of income is foreseen for the recyclers.

4.3.2 Phase 2: Training + capacity and organisation building for recyclers

This second phase will take place whilst the transfer stations are being constructed in the different districts. This phase should focus on preparing the different recyclers groups that will start to work within each transfer station.

Principal activities during this phase include:

- Training of recyclers so that they can a) operate in the sorting facility at the transfer stations or b) other functions within the transfer station.
- Process of definition of organisation model of recyclers and legal registration of chosen model.
- Capacity and organisation building of the recyclers groups as per the organisational and financial model.
- Development of monitoring and evaluation procedures and indicators for the implementation of the SIPs.
- Develop model agreements /contracts between SWaMA, the operators of the Transfer Stations and the recycler groups on how the sorting activity is financed.

This phase is expected to last 2 years and the recyclers groups should be prepared in accordance with the construction schedule of the different TSs.

During this phase it is assumed that the dump sites remain open and continue to receive waste and as such no loss of income is foreseen for the recyclers.

4.3.3 Phase 3: Recyclers integrated in operation of TS's

This phase will focus on:

- Accompanying the process of the integration of the recyclers into the transfer stations operations.
- Process of definition of organisation model of recyclers and legal registration of chosen model.

During this phase, in those municipalities where the transfer stations become operational, the dump sites cease to receive waste and it is expected that the recyclers groups will start to function in each of the transfer stations.

4.4 Estimated Budget

The table below provides an estimate of the costs associated with the implementation of the SIF whereby the assumption is made that:

- All the affected population will be compensated on different levels according to how they are classified. It will depend on the eligibility criteria and on the definition of different types of compensation for each case and on the prioritization that needs to be established during the initial phase of the SIF.
- The definition of options that will be offered exclusively or in combination, and considerations of phasing periods will be clearly described according to recyclers that work permanently vs temporarily.

- Some of those recyclers active on a temporary basis on the dump sites will not work at the transfer stations.

Table 16: Estimated budget for implementation of SIF from 2016 to 2021.

Quantity	Item	Estimated Cost (US\$)
1. Consultation process		
5	Consultation meetings Corozal (accommodation, food)	5 000
3	Consultation meetings Orange Walk	3 000
3	Consultation meetings Dangriga	3 000
3	Consultation meetings Placencia	3 000
3	Consultation meetings Independence	3 000
1	Consultation meetings Punta Gorda	1 000
	Total	16 000
2. Training needs assessment and training program development		
1	Training needs assessment for all districts	7 000
1	Training program development for all districts	7 000
	Total	14 000
3. Training and capacity building		
1	70 hours training and capacity building Corozal	7 000
1	70 hours training and capacity building Orange Walk	7 000
1	70 hours training and capacity building Dangriga	7 000
1	70 hours training and capacity building Placencia	7 000
1	70 hours training and capacity building Independence	7 000
1	70 hours training and capacity building Punta Gorda	7 000
	Total	42 000
4. Organization definition and registration		
1	Organization definition recyclers' group and registration Corozal	10 000
1	Organization definition recyclers' group and registration Orange Walk	10 000
1	Organization definition recyclers' group and registration	10 000
1	Organization definition recyclers' group and registration Placencia	10 000
1	Organization definition recyclers' group and registration Independence	10 000
1	Organization definition recyclers' group and registration Punta Gorda	10 000
	Total	60 000
5. Institutional strengthening of SWaMA		
1	Social specialist (5 years – 2017-2021) (30 000 US\$/year)	150 000
Sub-Total		282 000
10% discretionary budget		28 200
Total		310 200

4.5 Institutional Arrangements and Capacity

The three main stakeholder groups initially to be involved in the implementation of this Social Inclusion Plan Framework are SWAMA, the eligible recyclers at the different dump sites (whether represented by an organization or not), and the Operators of the new transfer stations where the recyclers will operate. Additional stakeholder groups to consider include the Town Council of the local municipalities (in which the facilities are located), intermediaries who purchase the recyclable materials, the operational staff at the transfer stations and relevant staff at the IDB (Country Office or HQ).

Belize Solid Waste Management Authority (SWaMA). SWaMA would be responsible for overseeing Safeguards compliance in this project, including livelihoods restoration of affected recyclers and any resettlement-related issued. SWaMA has very high capacity but no dedicated Specialist for Safeguards or social issues. We have recommended the hiring of a dedicated consultant, the drafting of TORs and a hiring process to begin. Coordination between SWaMA and the other actors should include:

- Regular meetings
- Division of tasks regarding monitoring activities

Recyclers. The recyclers per dump site will be responsible for setting up and operating their own organization to operate at each of the transfer stations with support from SWaMA, the operator of the respective Transfer station and other actors, including the Cooperatives Department.

Operators of transfer stations: The operators of the transfer stations would be responsible for overseeing, implementing and also monitoring the operations at the new facilities where recyclers would potentially be working at.

Belize Recycling LTD and/or other recycling entities. Belize Recycling is the main buyer of recyclables from Mile 3 and San Ignacio, and would play an important role as well in purchasing of materials recovered in the transfer stations. Southern Metal recycling also could play an important role in this respect. It should be assessed whether they would need a signed agreement with SWaMA and the TS operators. These contractual arrangements between SWaMA and the operator of the new facility to sanction:

- Agreements on payment of recyclers
- Working conditions of recyclers
- Additional compensation (if relevant)

Inter-American Development Bank (IDB). IDB is responsible for Supervision of all Safeguards-related work, including implementation of this Social Inclusion Framework and its subsequent SIPs.

Capacity assessment of SWaMA and the TS operators should include:

- Training activities
- Consultations events (with the eligible recyclers)
- Monitoring and Evaluation activities

5 MONITORING AND EVALUATION

5.1 Monitoring

The implementation of the Social Inclusion Framework should include the development of a Monitoring and Evaluation Plan (MEP) which would be applicable to each of the individual SIPs that would be prepared. This chapter outlines what should be included in such a MEP.

The MEP should include: (1) a set of monitoring indicators; (2) a supervision plan, including follow-up and recording of progress and results; and (3) an implementation timetable for M&E activities. The primary goal of M&E in this Project is to assess and follow the achievement of *full livelihood restoration and improved working conditions for all eligible recyclers*. Secondly it will measure efforts to improve their working and living conditions. The results of these M&E activities, including the identification and correction of any problems that may be identified during implementation, will be incorporated into the ongoing supervision arrangements. M&E activities are divided into: (1) Performance Monitoring; and (2) Impact Monitoring.

Performance Monitoring

Performance monitoring is divided into: (1) Internal Performance Monitoring; and (2) External Performance Monitoring.

(1) Internal Performance Monitoring

- a. Performance will be monitored by the operator of the Transfer Stations to measure physical progress against the milestones included in the Timetable above. Progress will be reported against the timetable of required actions found above.
- b. **Internal Monitoring.** Internal implementation reports for this Plan will be verified by the Project Supervisor³⁷, via regular field checks of the above items, including site visits, open-ended interviews and observation of key activities. These activities will seek to verify and assess, among other key aspects:
 - functioning of recycler operations at the unloading platform within the transfer station
 - distribution, condition and use of clothing, PPEs and ID badges
 - enforcement of site rules
 - availability, condition and use of on-site shelters
 - functioning of materials storage area (state of collected materials at the transfer stations)
 - functioning of grievance mechanism and level of dissemination and awareness
 - availability and condition of water and access to food
 - regularity, quality, attendance and results of medical visits
 - regularity, quality, attendance and results of training events

(2) External Performance Monitoring

- c. Open-ended interviews with a random sample of eligible recyclers will seek to gauge their knowledge and concerns regarding Plan implementation, expressed level of satisfaction, and any other key issues. Observations of consultations with recyclers and other stakeholder engagement events will be conducted. An assessment of sustainability of activities after the initial subsidized phase will be made. Based on the results of these activities, the External Monitor will prepare a report, complete with

³⁷ This could be the Social Specialist that is recommended to be hired.

written recommendations, to the project management indicating any necessary improvements to be made to the implementation of this Plan.

Impact Monitoring

Impact monitoring is divided into: (1) Internal Impact Monitoring; and (2) External Impact Monitoring.

- a. *Internal impact monitoring* will be conducted by the operator of the respective transfer station, to gauge the effectiveness of the Plan's inputs in meeting the needs of the eligible recyclers. Specifically, it will: (1) provide SWaMA with an assessment of the effects of the Plan; (2) verify internal performance monitoring; and (3) identify any necessary adjustments to be made in Plan implementation. Input from eligible recyclers will be included in all monitoring.
- b. *External Impact Monitoring* will be conducted by the Project Supervisor, to gauge results and inform the operator of the transfer station of any problems that may arise during implementation. The impacts of Plan implementation will be measured against the baseline conditions prior to the closing of the former sites.

Indicators

Impact monitoring should be based on the set of quantitative indicators which will need to be developed. The use of these quantitative indicators will be supplemented by the use of qualitative indicators, to assess the satisfaction of the eligible recyclers with and views on the Project and its implementation. Qualitative indicators will be measured via regular meetings, focus group discussions, and one-on-one interviews with eligible recyclers. The eligible recyclers will further participate, to the extent feasible, in all phases of impact monitoring, including the identification and measurement of baseline indicators.

Monitoring Timetable

Both the operators of the Transfer Station and the Project Supervisor from SWaMA are expected to submit quarterly reports to SWaMA, including progress on to be developed indicators.

5.2 Evaluation

Regular meetings should be held between the Transfer station operators and the Project Supervisor to evaluate the results presented in the monthly reports and any mitigation actions that were identified and recommended should be implemented. The outcome of the meetings should be communicated to the eligible recyclers and preferably the eligible recyclers, or their representatives, should participate, to the extent feasible, in these meetings.

ANNEXES

ANNEX 1:

SOCIAL ASSESSMENT DATA CHECKLIST APPLIED

The data check list applied during the visits in October 2015.

1. Socio-Demographic and Cultural Data

- a. How many people are involved at any given time at the dumpsite, transfer stations, streets and other locations?*
- b. Do the numbers fluctuate seasonally and why?*
- c. What is their demographic and social profile (gender, age, ethnic affiliation, religion)?*
- d. Do men and women play different roles in the system? (e.g., do men collect garbage while women sort, or specialize in different materials?)*
- e. Where do the recyclers come from? Are they migrants or from the city?*
- f. Are whole families involved? What are their compositions and sizes? What roles do different family members play, both in waste picking and the overall household economy?*

2. Organizational Structure

- a. Who 'belongs' to the waste picker group?*
- b. Is the system open or closed?*
- c. Is there an 'in group' and an 'out group'? What are these distinctions based on?*
- d. Are there any barriers to entry and what entry and exit points are available for newcomers? To what extent is the organization fair and equitable regarding people who wish to participate?*
- e. Is access to the dumpsite free or controlled? If controlled, by whom?*
- f. Are recyclers long-term or temporary workers?*
- g. Do they have other jobs or activities as well as waste picking?*
- h. Are they organized? If so, how? What is their structure, membership and nature of operation?*
- i. To whom do they sell recovered materials? What is the nature of their relationship with purchasers?*
- j. What is their relationship with SWM managers?*

- k. Are external organizations, such as government agencies, NGOs, or donors actively working with the community? What are their activities and what is the nature of their relationship with the recyclers and other key actors?*

3. Occupational Characteristics, Income and Job Satisfaction

- a. What proportion of recyclers work full- or part-time? What other jobs do part-time workers do?*
- b. How many hours per week on the average do they work at waste picking? Does this vary seasonally or according to other factors? If so, how?*
- c. What are their average hourly earnings from waste picking and from other jobs? What proportion of the income of different demographic and social groups derives from waste picking?*
- d. What are the current prices of recyclables on the market? What prices are they actually paid for their materials?*
- e. What are their reasons for doing this work? What is their opinion of it? Would they prefer other activities?*
- f. What are the risks they face on the job? What are the most common illnesses and injuries?*

4. Education, Health and Living Conditions

- a. Are recyclers susceptible to any particular occupational accidents and diseases? What are their prevalence?*
- b. What healthcare resources are there? What precautions are taken to protect them (e.g. gloves, protective clothing, masks, etc.)?*
- c. What are their levels of schooling and literacy?*
- d. Do their children attend school? If so, until what age and grade levels?*
- e. What is the overall status of their health? What are the most prevalent diseases? What are their main sources of exposure?*
- f. Where do they live? Is it near their work site or do they commute?*
- g. What are their housing and living conditions like?*
- h. What is the state of their neighbourhood? Do they have basic infrastructure (e.g., water and sanitation, health clinics, roads and schools)?*
- i. What are their consumption patterns? What do they eat? What other goods do they consume? Do they have cell phones?*

ANNEX 1.A:

CENSUS AND BASELINE SURVEY FORM APPLIED TO THOSE PRESENT AT DUMPSITE

The Solid Waste Management Master Plan for the Northern and Southern Corridors is seeking to improve the conditions for solid waste management in the Northern and Southern Corridor, which include constructing Transfer Stations with possible sorting facilities for (informal) recyclers and closing of current dumpsites. In order to prepare the options for facilities to be included in the master plan, it is important to obtain the opinions of the recyclers. All information obtained will be held in the strictest confidence and will only be used for the purpose indicated.

Recycler 1:			
Name:	Surname:	First:	Other
Address			
Sex		Male:	Female:
Number of persons residing in house:		Number of bedrooms in house:	
Type of family:		Position in household:	
Status of house residing:			
Distance residing from dumpsite			
Ethnicity:		Garifuna: Creole: Chinese: Mayan:	White: Indian: Mestizo:
		Mixed (which races):	
Age at last birthday			
Highest level of education completed			
Length of time involved in working at the dumpsite			
Did you work alone or with others?	Alone:	With others:	
If with others, who are they and how many?			
Why did you start working at the site?			
What products did you collect at the dumpsite?			
What did you do with the products you collected from the site?			
How often did you work at the site?			
Where did you sell the materials you collected?			
What is the name of the buyer and where is it located?			
How much money did you make each month?			
Do you have income other than from the dumpsite?			
From where did you obtain that additional income?			
Did working at the site give you enough money to meet your needs?	Yes:	No:	
What problems did you face working at the site?			
What could be done to solve these problems?			
How would closing of the dumpsite affect your income?			
Have you heard of the recycling activities at Transfer Station at Mile 3?	Yes:	No:	
Would you be interested to work at a similar type of facility if it were close by?	Yes:	No:	
Why?			

ANNEX 2 GRIEVANCE FORM

Grievance #:	
Date:	
Recorded by:	
Means of recording (check one):	<input type="checkbox"/> Phone Line <input type="checkbox"/> Community Information Meetings <input type="checkbox"/> Mail <input type="checkbox"/> Informal <input type="checkbox"/> Other (explain)
Name of complainant	
Address:	
Telephone:	
Signature:	
Nature of grievance:	
Proposed solution:	
Steps taken:	

ANNEX 3: REFERENCES OF BELIZE LEGISLATION ON SOCIAL ASPECTS

1. Socio-Economic Legislation

These legislations although not directly related to pollution control and prevention are also important to be considered by the contractors during project planning and implementation

1.1 The Labour Act

Labour relations between contractors and their workers will be governed by the Labour Act which makes provisions for recruiting employees, terms and conditions of employment, payment of wages, dispute resolution etc.

1.2 Workmen Compensation Act

The Workmen Compensation Act applies to workers who are involved with cases of accidents on the job or while being transported to the job. The Act makes provisions for the contractors' liability for compensation, amount of compensation, conditions of compensation, insurance, insolvency or bankruptcy of the contractor, etc.

1.3 International Labour Organization Conventions Act

The ILO Conventions Act lists the ILO Conventions ratified by Belize and which have the force of law in Belize. As such, these Conventions will govern the relation between contractors and their workers as to the particular subject matter of the Convention. These Conventions include,

52 inter alia, Minimum Age, Right of Association, Minimum Wage, Freedom of Association and Protection of the Right to Organize, Abolition of Forced Labour, Radiation Protection, Paid Leave, etc.

1.4 Social Security Act

Workers involved with the execution of the project are assured some monetary insurance by the provisions of the Social Security Act, which requires that contractors pay social security contributions for their employees to assist them in times of sickness or injury.

1.5 National Occupational Safety and Health Bill

Comprehensive legislation governing workers safety and health have been introduced in the House of Representative in the form of a National Occupational Safety and Health Bill. While this is not yet law, the provisions of this Bill serves as an excellent best practice guide for ensuring the safety and good health of workers involved with the execution of the project.

2. National Advisory Policies and Strategic Plans

2.1 National Solid Waste Management Policy

The National Solid Waste Management Policy was developed in 2015 as a shared vision by the GOB of how solid waste will be managed. This was developed through the consultation and involvement of all sectors and focuses primarily on domestic waste. It has as its vision, "A healthy, prosperous and resource – sufficient society in which wastes are prevented, re-used, recycled or recovered wherever feasible and beneficial, and disposed of safely only as a last resort." It has as its overall goal and strategy a system for managing solid waste s in Belize that is financially and environmentally sustainable and one that contributes to improved quality of life.

2.2 National Culture Policy (Draft)

The Government of Belize believes that the Draft National Culture Policy will provide the framework for identity-building and cultural exchange for the purpose of creating a cohesive and improved quality of life so that people throughout the world come to recognize and appreciate Belize's way of life. An improved waste management of Belmopan's solid waste will contribute greatly to the improved quality of life of the residents of Belmopan and its environs.

2.3 National Gender Policy

The National Gender Policy aims at, inter alia, promoting and facilitating women's and men's equal access to, and control over productive resources, services and opportunities. The employment and service opportunities provided by implementation of the project should therefore be available to both genders equally.