Diversification of the Energy Matrix and Energy Security; a gender approach

Cooperative Republic of Guyana



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Diversification of the Energy Matrix and Energy Security; a gender approach. Cooperative Republic of Guyana

# BACKGROUND

The Cooperative Republic of Guyana is a country located in the northern part of South America, the only South American country in which English is the official language; people of Guyana generally speak English and a Guyanese creole; although a South American country, it is predominantly associated with the Caribbean countries and its activities. Its population includes people of Amerindian, Indian, African, Chines and multiracial origins. The average gross national income is estimated at 6,884 USD[[1]](#footnote-1) per year according to the UNDP report, however, the average salary for a government official is estimated at 3,600 USD, according to the people interviewed in the various localities.

Development and access to energy are inseparably correlated. In Guyana, it is estimated that only 26% of the rural population has access to electricity services, one of the lowest rates in Latin America[[2]](#footnote-2). When there is electricity, it is unreliable and unstable, resulting in damages on electrical appliances. Even in the country’s capital Georgetown, electricity is unstable with frequent black outs and even more frequent tension drops that have a very damaging effect on all electrical devices and equipment. The project Diversification of the Energy Matrix and Energy Security aims to install a solar photovoltaic system as to support Guyana´s development and to strengthen institutional capacity and governance while ensuring a cleaner and diversified energy matrix. Moreover, it will reinforce infrastructure as to improve electricity reliability and stability, and also reduce costs thus improving the quality of life of the people especially in rural areas.

This study has verified the needs and requirements of the people living in the townships of Bartica, Lethem and Mahdia, identifying specific opportunities associated with the renewable energy project, capturing their ideas towards personal and community development and ensuring the improvement of the quality of life of women, men and children in the target communities.

# OBJECTIVES

## General Objective

The objective of this study is to prepare a gender analysis and to identify specific opportunities for women within the project *Diversification of the Energy Matrix and Energy Security* as to address current and future needs that will improve their quality of life.

## Specific objectives

* Review the social and economic baseline of the women living in the townships of Bartica, Lethem and Mahdia.
* Identify developmental, economic and social opportunities relevant to women and men, boys and girls.
* Propose strategies and activities to maximize the benefits of the project towards gender equity.
* Verify if and / or how the project will have an economic and social impact on the lives of women, men and children.

# SCOPE

This study targets the three communities involved in the *Diversification of the Energy Matrix and Energy Security* project, that is Bartica, Lethem and Mahdia.

# METHODOLOGY

The study reviewed the social assessment study baseline as to understand the living conditions and situation of the townships of Bartica, Lethem and Mahdia. Using this information as a reference, interviews were conducted with local officials, NGOs, Foundations and local populations as to analyze and identify opportunities, especially geared towards women and their families. Qualitative and quantitative data was collected and correlated.

## SAMPLE POPULATION

The township of Bartica has an estimated 10,000 inhabitants, of which more than 10% have no access to electricity, all located in rural areas. The interviews included: 12 women from the RDC, Ministry of Social Protection and Hope Foundation, and 58 women from the community of Dagg Point, an Amerindian rural community now part of the Bartica Township; this community has no access to electrical energy.

The township of Lethem has an estimated 8,500 permanent inhabitants plus some 1,500 regular visitors, all have access to electricity 24 hours per day. The interview included 6 women working with women organizations and also the Mayor of the town.

The township of Mahdia has an estimated 2,000 permanent residents with an additional 3,000 persons working in the mines, as loggers and in local business. Of the permanent residents, some 1,000 persons live in the reservation of Campbelltown. People living in the center of the town have access to electricity some 18 hours per day while in Campbelltown, only about 205 of the population has access to electricity. Suring the meeting at the RDC center, 22 persons attended the meeting. In Campbelltown, 50 people attended the meeting; only about 20% of this community has electricity.

## Investigative data collection techniques

The investigative techniques to be used will include:

* Review of literature
* Social data capture
* Field visits
* Interviews.

## Interviews

## Questionnaire

The interviews were conducted using a questionnaire and through careful observation, listening and interaction with the interviewed people as to ensure not only to gather the information for the baseline but also to well understand the current situation, needs of the people, and how the project can and will impact their life. Annex 1 shows a copy of the questionnaire that was used as a guideline as to acquire the information on the three townships.

## Location and time for interviews

**Bartica**

In Bartica, two interviews took place, both on Friday 27 of July 2018.

The first interview was held at the office of the Regional Democratic Council (RDC), which is the supreme Local Government Organ in Bartica; the meeting started at 11h00 and finished at 13h15. From the meeting room, we were invited to visit a building that can be used as a counterpart for project implementation of a training or productive project.

Meeting at the RDC office

The second interview took place in Dagg Point Community Center with the Amerindian community; the meeting started at 13h25 and finished at 15h00.

Meeting in Dagg Point

**Lethem**

In Lethem, the interview was scheduled at 11h00 on Wednesday 01 of August 2017. For some reason, it was postponed to 14h00 in the afternoon. The meeting was held at the Indigenous People’s Conference Hall and concluded at 15h05.

Meeting with local women

**Mahdia**

Two meetings were held in Mahdia. The first meeting was held at the RDC center on Thursday 02 of August at 10h00 to conclude at 12h30. 22 persons attended the meeting in Mahdia Center. People in Mahdia have electricity some 18 hours per day except for weekends when the have 24 hours per day of electricity.

Meeting in Mahdia Center

A second meeting was held in Campbelltown at 13h15 and ended at 15h00.

Community meeting in Campbelltown

## Processing of data

1. Digitalization: Data was converted into digital information
2. Verification of consistency of results
3. Comparative review of information from the various sources
4. Analysis of results

# RESULTS OF THE VISIT AND INTERVIEWS

## THE CASE OF BARTICA

## Bartica general overview

|  |  |
| --- | --- |
| House in Parika | Speed boat to/from Bartica |

Bartica started as an Anglican missionary settlement established in 1942. Referred to as Vyrheid by the Dutch, the name Bartica remained and is an Amerindian name that means “Red Earth” the color of the soil in that areas. To reach Bartica, a car drive of some 45 minutes from Georgetown was required up to Parika where river boats taxis are available on regular basis; the high-speed river boat reached Bartica in one hour. An estimated 10,000 people live in Bartica of which over 10% of the people living without electricity services and all of them living in rural areas. The people of Bartica, as for the rest of the country, come from different ethnicities: Amerindians, African, Indian, Chinese, Multiracial. Although the town of Bartica has electricity, it is unreliable and unstable, obliging people to use gasoline generators if they want to have electricity on a daily basis. Several communities were added to Bartica when it was elevated to a township in 2016 resulting in unserved population who do not have access to electrical energy, a key factor that impedes the economic growth of these areas.

Port of arrival in Bartica

The gender balance in Bartica is not typical to the country. Although a generally male dominated society, as Bartica is a mining town, men must leave the house for weeks and months at a time to go work in the open gold mine, leaving the women in charge of the household, the farm and the children. As such, women become head of the family household, assuming full responsibilities for maintaining the house, working the land and taking care of the children. This also translates in the fact that many women do not work outside the household, do not have a specific profession, and are living from the income generated by their husband and what they can generate from the farm when available. Some women without husband are obligated to generate income for their survival and that of their family, as such they go to work at the mine as a cook or to clean, or seek other income generating activities.

## Climate change

Over the past years, the climate has changed with an increase amount of heavy rains which results in floods and mudslides. As Bartica city has three sides of water, the increased rains have made the rising of water even more problematic. Although the people do not see any signs of air contamination, they all agree that a solar system is a clean solution to a major problem, and that it offers a reliable and accessible source of electrical energy. All believe that the project will be beneficial and more importantly, that it will allow access to energy to over 725 persons (Dagg Point ~365 persons, Five Miles Housing Scheme ~ 360 persons), resulting in the electrification of over a thousand persons, people that to date never had access to electricity in their everyday life. In the center of the town, there is electricity however many people have installed gasoline generators as to ensure energy supply 24 hours a day. Unfortunately, several persons invested in freezers and other electrical appliances which were ruined because of blackouts and power surges. All hope that the installation of a solar PV system will provide the electrical stability that will allow them to reinstall and use their electrical appliances and electro domestics in a safe and efficient manner. Moreover, this project will eliminate the need for using a fuel generator, thus reducing the noise and contamination associated with the running and burning of the fuel, and the costs for the 4 hours or so of use of the generator which implies a cost of some 2,400 GYD or 12USD per day of use. In fact, some families have already started using SHS for their house as a back-up instead of a generator, systems of about 100Wp installed mainly for illumination and mobile phone charging.

House in the outskirts of Bartica

In Dagg Point, there is no electricity and therefore some few people use gasoline generators during the evening between 18h00 and 22h00 as to use their television and benefit of illumination. All people have mobile phones that must be charged using the generators.

## Street lighting and security

One important aspect which has not yet been addressed by the municipalities is security during night time. In the city center the roads have street lamps but the rest of Bartica has none. As such, the women of the various localities have invested in the installation and maintenance of street lamps to ensure their security, this means when there is a problem, the people themselves pay for the technician to repair the lamp or to change the light. The women of Dagg Point confirmed the inexistence of street lighting and therefore avoid going out at night for security reasons.

Entering Dagg Point; no electricity, no street lamps.

## Waste collection and water services.

Waste is being collected on regular basis in all parts of the town of Bartica. In other communities such as in Dagg Point, the waste is collected along the main road. For people living away from the main road, a temporary wild dumping area is used by the people to dispose of the waste and to burn it. There is no recycling or reuse of materials although there is said to be a large quantity of plastics in the waste.

Solid waste municipal dump site

Central Bartica has tap water, many places have water every other day, but other parts of Bartica such as Dagg Point, the people mainly use rain water collected as there is no water service and go to collect water from the creek located at about 1.5 miles from their home.

There is no wastewater recollection or treatment system.

High levels of plastics

## Education

Bartica has some 7 nurseries, 4 primary schools, 2 secondary schools and one private secondary school; education is free for all students, except for the private school. All educational centers are government owned and have electricity but only secondary schools offer computer laboratories. The Ministry of Education has a programme to provide computers to all schools, nevertheless, it started by secondary level schools and has never entered the lower levels. Moreover, there are no internet services for the students to conduct investigation and access up to date information.

Most children in the town obtain their high school degree to then enter the labor market; as there are no universities or technical schools in Bartica, very few go to Georgetown to pursue their studies.

In the remote communities such as Dagg Point, children complete their primary school and generally do not continue their studies because of the remote distance that needs to be traveled: at primary level, children walk three miles in the morning to reach their school in Agatash, and the same in the evening returning home. However, to go to secondary school, they need to go to Bartica and for that they need to pay for transportation (numerous children means high costs for transportation), when available, which makes it difficult or impossible to attend, leaving them with a primary level education level. There is a very high dropout rate of high school students because of the long distance.

The PTA meetings are mostly attended by women while men are working in the mines and therefore many women are making the decisions. However, in Dagg Point, the women said that the decision on education is made by both parents.

There is a very low rate computer literacy among adults between the ages of 30 to 50 years. Training on computer technology is highly needed to help people access information and facilitate communications through internet.

## Health services

There is one hospital in Bartica and several outpost centers in the various localities. The people from Dagg Point must travel to Agatash or to Bartica for health services. These facilities generally have electricity and refrigeration that allow to keep medicine and vaccines. However, unfortunately, many of the vaccines are not available. Healthcare is free but remains very basic.

## Agriculture and agro processing activities

Many people are involved in small agricultural activities, mainly cash crops such as cassava, sugar cane, bora and other vegetables. The local production is insufficient for the local consumption and as such it has to be brought from other parts of the country and from overseas. The crops are mainly for home use; some are sold but unprocessed. There is some cassava milling and cassava bread production, and the women expressed great interest in agro processing activities. In Agatash there is some important poultry raising activities, with farms producing some 300 birds every six weeks for meat, and also farms of 100 – 150 birds for egg production.

## Cooperatives

There are no cooperative organization apparently because of the multicultural society of Guyana that makes it difficult for people of different cultures to work within a single cooperative. The Ministry of Indigenous Affaires is promoting the establishment of local organizations for both women and men.

## Community decision making

Decisions are made during community meetings according to the opinions of people attending the meeting. Ae mentioned previously, men are working in the mines and are absent for several weeks and months at a time. As such, community decision making is made based on the people attending the meetings, which means a high number of women. Moreover, some women are part of the councils; for example, the Regional Democratic Council, the Town Council, the Community Development Council; additionally, women are occasionally asked for advice on specific topics.

## Land tenure

According to the laws of Guyana, women and men have equal rights to own or lease land; there is total equity. Both men and women are land owners.

## Division of labor and housework

As most men work in the mines, the division of labor is clear, the men work and generate income while the women take care of the home. The roles are not balanced and as men are absent from family life, the women must assume the responsibility of mother and father. Within the house, the full responsibility of the house resides on the women. There is increased participation of men, especially in the younger generation, within household activities and housework in general but is still mostly the responsibility of the women.

## Leadership and gender

Considering the case of Bartica where the men are not present in the everyday activities, women in Bartica are the head of the family, making all decisions for the house, the farm, the children and their education. Nevertheless, the women in Dagg Point, although responsible for the household, are acting as the head of the family in their absence; they admit that men are still the head of the family.

## Use of household and electronic equipment

 In the town of Bartica where there is access to electricity, the people all use television, radio, appliances such as toaster, microwave, some have washing machines. They used to have freezers but with the power cuts, they lost food and many of the appliances burned because of power surges. Most of the cooking is done using gas and some wood fuel.

In Dagg Point, considering the absence of electricity, everything is done manually. Cooking is done using gas, kerosene and wood; wood is collected by women and children. All use mobile phones and many have a television with the use of the generator. In Dagg Point nobody has any computer. Few use their phone for internet buying credit. All would like and requested to have access to internet, that is in the town of Bartica and in Dagg Point. However, there is a major problem with internet access, with prohibitively high costs and currently the lack of electricity.

Meeting in Dagg Point with adolescent using cellular phone

## Sources and levels of income

Most men work in the mines while others living on the outskirts of Bartica are working in logging. Women stay home to take care of the house, farm and children. Some women work in the mining camps, some work for government and for various organizations.

The income for government officers is equitable, for the same work same salary. The average salary for a government employee is 60,000 GYD (~300.00 USD) per month. In the private sector, the owners are free to offer the salary they want according to their personal decision; the average salary in the private sector ranges between 40,000 – 45,000 GYD (200.00 to 225.000 USD) per month.

The number of family members in Dagg Point can reach up to 18 persons.

## Household expenditures and economy

Rent is quite high in Bartica and ranges between 15,000 – 70,000 GYD (75 to 350 USD). Both men and women can open bank accounts. However, many people have loans with banks and therefore must open a bank account to receive the loan. The people of Bartica can select from three existing banks within the town. In Dagg Point they say they spend some 31,000 GYD (155 USD) per month for gasoline. As for the food, the people spend between 15,000 and 20,000 GYD (75 to 100 USD) per week considering the extended family structure which ranges from 5 to 15 people per household.

## Capacity building and training programmes

The Ministry of Social Protection offers various training programmes such as operating heavy machinery, welding and catering. The Hope Foundation is based in Bartica and is

offering courses in welding and fabrication, motor mechanics and these courses include the participation of women; there are also courses in catering and as heavy-duty machinery operator. The Foundation also implemented projects on HIV awareness. Women organizations are offering services such as daycare. They are seeking resources to offer training in catering, sewing and for life skills, especially dealing with emotional problem solving.

The Hope Foundation

In Dagg Point, UNDP implemented a chicken raising programme, a community management and a Golden Jubilee sewing project while the government implemented a sewing program and is about to implement an interlace employment programme. Women organizations are not active in Dagg Point.

## Identified social and productive activities

Following are the social and productive activities identified during the interviews with local communities and officials of Bartica, based on their needs, their requests and their necessities as to improve their quality of life and that of their family with the implementation of the Solar PV system to be installed in their community.

Identifying productive activities with the women of Dagg Point

1. Internet was a recurring topic for which all participants agreed it is a necessity. Access to internet implies better information and communications. Moreover, children living in remote areas could pursue their studies through distance learning programmes. Computer literacy training programmes are required to teach adults on the use of computers. The people of Dagg Point also requested access to technology with internet connection and training. They also stressed the fact that it could allow distance learning for young and old. A computer literacy programme along with a small internet café or community computer center would help the people from the community in their communications, their access to information and could even encourage reading for youngsters and other members of the community.
2. Water treatment is required for drinking purposes. As such, a community base drinking water purification and refill system could be implanted as to provide health benefits and generate income at community level. The proposed system could include a three-state filtration, ozone and UV sterilization and a final filtration before refill. The components of the system are low cost and will guarantee good quality water especially for children as to avoid health related problems such as diarrhea associated with contaminated water.
3. Food and nutrition are crucial for the development of future generations. Women need to know about the importance of proper food while pregnant and for feeding their children proper food that include nutrients.
4. Tourism and hospitality are in increasing demand in Bartica considering the higher number of visitors in the locality. As such, this area offers a potential sector for employment opportunities while supporting the development of the Township.
5. In view of the high level of plastic in waste, the recycling of plastic and especially of PET bottles offers a good income generating opportunity. To verify the feasibility of such an activity, a proper evaluation of the quantity and quality of waste is required.
6. The people of Dagg Point were very enthusiastic in their request for a sewing factory as a community activity. The project could initially use manual (foot operated) sewing machines to then increase the production by adding small motors to the sewing machine to make them electrical. Some 20 to 30 machines would set up the community fabrication center that would allow the women to make clothing and uniforms that could then be sold in Bartica and other communities.
7. Considering the absence of electricity in Dagg Point, all washing is done by hand. The installation of a community laundry service could allow women to wash their clothes using electrical washing machines once electricity is available in their community.
8. There is a high level of adolescent child pregnancy. These young girls lack the skills to raise their child and earn a living; they need to learn the skills necessary to take care of their baby and to prepare themselves for the working life. A half-way house could allow them to learn the professional and life skills they need, such as how to take care of their baby, how to cook, they could continue their education, and they could prepare themselves for job interviews, learn how to answer to questions, how to behave in an interview, how to dress for the interview and much more; this would help them sustain themselves and their child with dignity.
9. Base on a report from WHO and the Ministry of Health[[3]](#footnote-3) the suicide rate in Guyana is the highest in the world with 44.2 per 100,000 persons compared to 11.4 and 7.3 in general and in America respectively. According to the Ministry of Health of Guyana, one person dies from suicide every one and a half day. Many of these suicides are preventable considering there are 20 to 25 attempts of suicide for every death. However, it should be noted that these attempts are 75% more predominant in women than in men although 70% of death by suicide are men. Counseling services on domestic violence would help reduce the high level off bullying and suicide currently present in Bartica. A Suicide Prevention Strategy 2015-2020 was implemented by WHO in cooperation with the Ministry of Health of Guyana following wide stakeholder consultation which included representatives from civil society, government ministries, Non-governmental organizations, health administrators, general health professionals, and community and institutional based mental health care providers. Further investigation would be required to see how IDB could cooperate in this project alongside WHO and the Ministry of Health.
10. People from Dagg Point community are seeking assistance to have regular transportation to and from their community to Bartica. This would help the population and the students to go to school.

Overview of building of over 200 m2 space

It should be noted that the Regional Gender Affairs Committee Building is available as a counterpart for the implementation of any training and capacity building programme. It is located in the town of Bartica and offers and area of over 60 m2 only for training and income generating activities, plus a kitchen, bathroom and additional space that could be used for sleeping, storage or other, as shown in the pictures.

|  |  |
| --- | --- |
| Over 60 m2 open space available for activities and training programmes (half the building) | Kitchen facilities |

## THE CASE OF LETHEM

## Lethem general overview

The easiest way to reach Lethem is by plane, for which there are daily and multiple flights; the flight has a duration of one hour using a Beechcraft aircraft. Because Lethem is a gateway to Brazil with its border located some 2.5 km, many passengers coming and going are Brazilians, obligating all passengers to go through customs even on this local flight. The border can officially be crossed using a bridge, and allows many illegal entry points through swamps and water.

Flying to Lethem

Lethem is a mixed community of people from Amerindian, Indian, African, Portuguese, Chinese and other mixed descent. The heterogeneity makes Lethem a somewhat complex community, all seeking power and appropriation of the town. This results in friction between the various ethnicities making very difficult the development of cooperatives or mixed group organizations; the issue of racism is rampant.

Lethem is divided into 5 constituencies. Over 57 satellite communities surround Lethem, however, these are not included into the township. The population is divided as approximately 60% women and 40% men. The families are generally large with 5 to 7 children where many women are left alone to raise their children as the husband abandoned them to start another family with someone else; women are strong in Lethem but in dire need for help and support. Nevertheless, the township is growing rapidly as a border town, although basic infrastructures are lagging way behind those found on the Brazilian side. Tourism is thought to be the key for the future development of the town; there is also a plan to make the town a duty-free location.

Moreover, Lethem is preparing the implementation of an industrial park which will promote regional development. The project will also include 12 incubators especially for small business and will support local business development.

## Climate change

Lethem people have noticed some changes in the pattern of the whether; once predictable, today the rains appear stronger and the seasons have somewhat shifted. As Lethem is still with unpaved roads, during the rainy season the roads ore muddy with puddles of accumulate water that deteriorate the roads even further.

Since the installation of six diesel generator sets for the towns electricity production, the electricity has become stable and reliable. However, the prices for electricity is very high, between GYD 80.00 to 85.00 (USD 0.40 – 0.43) per kWh and up to double this amount for businesses. Most households use both 110V and 220V

## Street lighting and security

Within the town, as Lethem is not a rated town, street lights are found only on the main roads but are still missing on secondary roads. Moreover, with the high influx of people from Venezuela, there is a need for more streetlights. The Mayor knows that street lighting is necessary especially for the security of the girls and women of the town, and is working on further illumination; there are currently only 50 street lights in Lethem.

Electricity but no Street lamps

## Waste collection and water services.

Waste is collected by a contractor once a week for households, twice a week for business and three times a week for restaurants. There is no separation of waste and no recycling. The waste is then sent to a landfill where it is compacted and covered with soil. Once this landfill is full another one will be opened.

All of Lethem receives piped water, the water has a very high salt content. It is not recommended to drink tap water.

## Education

Lethem has 2 nurseries, one primary school and one private school also for primary level students. After completing their primary school level, students must travel to St.-Ignatius an Amerindian community governed by the village council, not part of Lethem, for secondary school level located 1 km from Lethem. Many children finish school following completion of the primary level. There is no technical school or university available nearby for tertiary education; any student wanting to pursue their studies must move to Georgetown to live and study, which means only the privileged from wealthy families can afford this. Although primary and secondary education are free, University studies are not and students will need to add the costs of room and board. For large families, this is difficult and often the boys are sent to study rather than the girls. As such, most children finish high school and start working.

The Cyril Potter College of Education (COCA) Distance Learning in Georgetown offers some courses by sending facilitators to Lethem for the past five years. There is no distance learning program using radio or internet. It would be easier if it was done by internet but the communication system is very poor; the mayor confirmed that Lethem is very behind in communications.

There is a low rate computer literacy in Lethem. Both men and women decide on the education of the children. Unfortunately, if a family wants to send a child for education, they will send the son rather than the daughter out of fear that the daughter will get pregnant or other problems.

## Health services

Lethem has one regional hospital and one clinic catering especially for children and pregnant women; there are doctors there to attend pregnant women. There is a UNICEF representative at the hospital. Both have electricity and backup generators. The also offer all the required vaccines for the population, which they keep in stock. There is a good vaccination program implemented. Some women are not taking their vaccines.

## Agriculture and agro processing activities

Many households cultivate cash crops but not on a large scale. These crops include mostly vegetables, cassava, cashew nuts and peanuts; cultivation is automated. There is little marketing for selling produce. There are no controlled systems for cultivation and selling.

## Cooperatives

There are no cooperatives, mainly because it is very difficult for people from different backgrounds and ethnicities to work together. Some women organizations are trying to help in some areas but due to shortage of fund they often have to stop their activities.

## Community decision making

Decision making is done through the various council meetings that are held. The main councils include the Regional Democratic Council (RDC), and the town council as the local government. Anybody can become part of the councils; there are no biases. Women in Guyana are very strong because they are needed to lead.

## Land tenure

According to the laws of Guyana, women and men have equal rights to own or lease land; there is total equality. Both men and women are land owners and if they are married, the land document would be in both names.

## Division of labor and housework

Women work very hard. There is some preference towards men in the private sector. In the public sector there is equality of work and salary. Household work is shared; women in Lethem are more dominant. Many men make children and leave. Taking care of children, women are more involved basically according to the flexibility of working schedules.

## Leadership and gender

Many families still live according to the Bible where is says that the man is the head of the home. Woman is the executive. Many women live alone and therefore they are head of the families as an obligation. Majority of women are not educated and therefore they do hard work but are not decision makers.

## Use of household and electronic equipment

People use household appliances thus facilitating the management of the household. Cooking is done using mostly gas. Most people have mobile phones. No computers.

## Sources and levels of income

Mainly from government work, and some are self-employed. The average government salary is GYD 60,000 (USD 300.00) per month.

## Household expenditures and economy

Cooking gas, transportation, groceries. The costs depend on the number of people per household. Some households have six people; there are many extended families up to twelve people in a family. On average people have five children.

There are two banks in Lethem. These are necessary since all government employees get paid through the bank, as a requirement since majority of salaries are paid through the bank.

## Capacity building and training programmes

There is an agriculture station offer veterinary education, livestock and basic farming. In the villages there are some NGOs working but in Lethem there are none. Everything goes through RDC, the is a Lethem council social development committee welfare to help women and the welfare of children.

There are some women organizations but in involved in training and enterprise development. The women organization Red Thread was working to help in domestic violence cases but they ran out of money and as such had to stop. As such, this group could help implement some projects should they receive funding.

## Identified social and productive activities

There is a need for counseling as there is a high level of domestic violence, incest and sexual abuse. Education is empowering and as such, educating the women and the men could help reduce the high incidence of violence in Lethem.

Women, especially between 16 and 35 years of age would benefit from education and training programs in Lethem.

Based on the necessities of the local population during the interview meeting, the following productive activities have been identified, activities that could improve their quality of life. Lethem mayor confirmed that there is a building that RDC is not using and that could be used; the building needs some repairs; there are buildings available:

1. Access to internet communications is required. Women and students in Lethem have no access to internet. As such, most women are computer illiterate and would require training program. Children have limited opportunities to develop their computer skills and to access to higher education through distance learning program. There is a need for computer literacy and internet connection in Lethem.

Indigenous People’s Conference Hall and Hostel

1. People are looking for additional sources of income and skills development. As such, a training center is required that could offer the following:
   1. Training in sewing and selling (uniforms) would offer the women of Lethem this opportunity. This could be done as a group income generating activity.
   2. Cooking and catering services as to serve the local organizations.
2. Counseling center for domestic violence, sexual abuse cases and incest. It is necessary to educate the young women; education is empowerment, it is not only acquiring knowledge but it also increases self-esteem. There are some very talented young women that are working as typist or salesperson in shops that have the potential to further study but have no opportunity. Some have great ideas but there is no assistance to help them develop their potential. Some specialty courses should be brought in to help them develop their skills, such as accounting. Young women aged 16 to 35 should receive counseling as to convince them that the world does not end with the problem. Especially in the area of hinterland, are more vulnerable. The coastlanders are more aware of the tourism and associated problems. The young woman is not prepared for the real life. There is a gap between the school and the professional life. Women not working could study during the day and women that are working can study during the night. Lethem is one of the largest regions of the country but there are no support programs. Many women do not have the skills to get decent work and therefore must remain with an abusive problem. If you offer knowledge you offer everything.
3. Tourism and hospitality required as Lethem is a border town, receiving many people from Brazil located only a few kilometers from Lethem.

Bridge unifying Brazil and Guyana

## Conclusion and Recommendations for Lethem

The interview in Lethem showed that although some women are very strong, there is a high number of young women that are unqualified and that did not get the opportunity to develop their skills and knowledge. Lethem has a stable and reliable existing electricity supply; however, the costs are prohibitively high ranging from USD0.40 to USD 0.425 per kWh, adding to the already high cost of living in the country.

The Mayor of the city is determined to develop Lethem, and to consider the specific needs of girls and women of the community, while thinking of the future of his two daughters. Several projects should be further investigated as to their feasibility and implementability given the existing energy supply.

Lethem is seeking support for productive activities and needs social support activities. Following are some recommendations:

1. **Internet services for communication and education of women and youngsters of Lethem.**

Women of Lethem requested access to internet communications as to open educational opportunities for their children in terms of development and for distance learning programs; there are no internet cafes in the community but local businesses and hotels do have internet access. Organizations such as UNESCO, and especially the local Ministry of Education should develop such programs in collaboration with Guyana University or technical schools as to promote skills development in the new generation and offer them opportunities to access jobs and higher education. Some government buildings could be used for the implementation of such a project.

1. **Implement a skills development training center.**

A skills development training center could offer various training programs such as sewing and sales of uniforms to the Lethem Community, according to requirements. A feasibility study would need to be conducted as to verify the market. Other types of training programs could include catering, cooking and even more advances courses such as accounting, this according to interest and market demand. As such, a labor demand profile should be developed as to ensure that trained persons would be absorbed into the skilled workforce market.

1. **Halfway house**

Many women in the community are sexually abused o victim of domestic violence and incest. These women need to rebuild their spirit and inner strength in order to go ahead with their lives and generate income to support themselves and their children. A halfway house would allow the empowerment of women through education and skills development. This project could easily be combined with the skills development training center combining the technical skills development with psychological support and emotional strengthening. Especially aimed at adolescent girls and women aged 16 to 35, the halfway house could offer a second chance towards a new life for these women. This project could be developed and implemented through the Regional Gender Affairs Committee (RGAC) of Lethem. The Ministry of Social Protection could also participate in this project.

1. **Tourism and hospitality**

Central Lethem is located only a few kilometers from the Brazilian border. As such, there is an increasing number of tourists entering Guyana through the Brazilian – Guyana border. It is obvious when crossing the border that the Brazilian side is much more developed than the Guyana side, as such, there is a need for better infrastructure and to prepare the people of Lethem in their ability to receive the incoming tourism as a source of income for the community. For this, tourism and hospitality would prepare some people, in this new opportunity that offers tourism, extending these opportunities to the women of Lethem.

Poor road quality

## THE CASE OF MAHDIA

## Mahdia general overview

Mahdia is a small community located in the Potaro-Siparuni region of Guyana with its main activity being gold and some diamond mining. Mahdia is accessible by road from Bartica but its condition is very bad, especially during the rainy season. As such, the easiest and fastest way to reach Mahdia is to travel by plane; as there is a small local airport in Mahdia, small single or dual engine planes will bring you to Mahdia from Georgetown within an hour for a cost of close to 300 USD return fare; this cost is equivalent to one-month salary for a government worker.

Airplane to Mahdia

Mahdia was established in 1884 during the emancipation of the Africans and includes Mahdia central, a mixed community (ethnic origins from Africa, India, China), and Campbelltown, an Amerindian community of some 1,000 persons, also there are two satellite communities, that is, Princeville with some 200 people, and the Morawhanna community with some 100 people. Mahdia has a total population of some 2,000 people plus some 3,000 miners and workers such as loggers and business people. Families in Mahdia are generally extended, including 7 to 10 family members per household. It should be noted that gold is found everywhere in the community, including in small streams on private land, thus the gold rush. As a mining community, the night life in Mahdia is prominent with at least ten locales that offer drinks, food and young girls working as prostitutes on a nightly basis. There are numerous dress shops to cater for the high demand of clothing for the working girls. There are two gas stations in Mahdia and several grocery stores; there are no banks or ATM machines. The currency used is Guyana dollars with some exceptions that accept US dollars upon authorization of the business owner. There is one very nice international standard hotel at a cost of 40 to 60 USD per night, and several guest houses.

## Climate change and the PV project

Climatic conditions have changed over the years. Seasons used to be clearly defined but now, the seasons have changed. For example, the rainy season used to be from May to June, and now it started in May and is still going strong in August; this show that there is a definite change in the weather patterns.

Meeting in Mahdia Center

All have heard about the project and how it should improve their quality of life. At present, the people in central Mahdia receive 18 hours per day of electricity. During the weekend they get 24 hours per day. This means that for the people with businesses, they need to have a generator to ensure electricity. The cost of electricity at the moment is about 100 GYD per kWh or 0.50 USD per kWh, a very high cost for the low-income families; for many, the use of a generator is impossible.

Mahdia center

In the adjacent Amerindian community of Campbelltown, only 20% of the people have access to electricity. This means that for the community of 1000 people (or some 100 households), only 200 people have electricity while the other 800 people are still living without electricity.

For the people that have electricity, they can use every type of electrical appliances; many businesses use freezers as refrigerators because of their higher efficiency. Lightening is said to affect the quality of the electricity. There are many black-outs.

In Campbelltown, in the year 2012-2013, the government provided some 70 – 80 SHS for the 80 or so households that are without light in the community, just enough power for two lamps. People said that the SHS are no more operational and therefore are again living without light.

Campbelltown without electricity

## Street lighting and security

There are no street lamps in Mahdia nor Campbelltown. The concept of night security seems to be non-existent. One business owner installed a lamp on a post in front of the house for security purposes. Because of the night life, the lights from the clubs send some light in the streets.

The RDC mentioned that they have a plan to install street lamps in the center of the community but for the moment, nothing has been done. There are no such plans for Campbelltown.

## Waste collection and water services.

Municipal solid waste is currently being sent to a dump site located at some 2 miles from the center of the community. There is a sporadic collection of waste but one can see around the community many small unmanaged dump sites or accumulated garbage, its size being reduced by burning the waste on a regular basis. There is a trailer for the collection of waste and the cost of collection is 1,000 GYD (5.00 USD per barrel).

Small dump site in central Mahdia

In Campbelltown the waste is buried and burner in the pits.

There is no piped water in many places. Most people use rainwater and water from the creek when it has water. During the dry season, the creek also dries out and therefore people must go to the mountain to get water, which is located at some 4 to 6 miles. There is currently a 10 million GYD (75,000 USD) project for water supply and distribution; it is still at a project stage.

Campbelltown uses rainwater, spring water located one mile away. Water is a real problem for the community; even the creek water that is used is not clean with some sceptic tanks draining into the creek uphill, with people using this water for cooking, cleaning and drinking; children get diarrhea and there are cases of typhoid from the poor-quality water. During the dry season, people need to walk some 2 to 4 miles to fetch water.

## Education

Mahdia has 2 nurseries, one primary school, one secondary school and a private school that include a nursery, primary and secondary levels. There is a high drop out of students since students living in satellite communities need to walk at least 2 miles to reach the school. The average student in Mahdia completes high school but since there is no technical or tertiary level education locally, very few travels to Georgetown to study due to the high costs of living in the city. There is a need for a scholarship program or eventually, a distance learning program within Mahdia. There is interest in technical vocational programs that could be development in collaboration with the Central Government.

Secondary school in Mahdia

The secondary school offers basic computer literacy but since the internet access is very poor, the developments are limited. There are no internet cafes in Mahdia.

Education for the children is mostly decided by the mothers since the PTA meetings are attended by the mothers while the fathers are working at the mines.

Children of Campbelltown go to Mahdia center for school. Most children finish high school. In the cases of single parent families, the eldest child must contribute to the maintenance of the household.

## Health services

Electricity in Campbelltown

Mahdia has one hospital, 3 health posts with no staff and therefore not functioning. One health post has a solar system to provide the required electricity. Another has a hydro plant as a back-up system.

People of Campbelltown use the hospital in Mahdia center in which they have equal rights and access.

## Agriculture and agro processing activities

Due to the predominant mining activity, farming is at subsistence level as to compensate the low income of some families. The agriculture department installed a solar dehydrator system with a tomato processing plant where they produce tomato sauces, dressings and pacaraima flavoring. This venture is meant as a local business development.

People of Campbelltown are also involved in subsistence farming with cassava, banana, potatoes and plantin; all cultivation is manual. They are processing the cassava making flour (farine), cassava bread, tapioca and starch. They also make local drinks such as purple and black drinks from potatoes (alcoholic beverages), and prepare typical Amerindian specialty foods, all of which they sell at the market in Mahdia center to Mahdia people every Saturday.

## Cooperatives

As everywhere else in Guyana, there are no cooperatives.

In Campbelltown, the village council and the Christian organization support the local organization.

## Community decision making

In community decision making, both men and women participate. In fact, there are many women participating since the men are working in the mines and therefore not present for the meetings.

Al residents of Campbelltown participate in the village council since according to their bylaws, all decisions must be approved by the villagers during the community council. The community is led by a village chief, namely a “Toshao”. Since the month of April 2018, the elected Toshao is a woman with many ideas and determination to develop the community.

From right to left: Toshao, her husband, Isidro, myself, assistant to Toshao.

## Land tenure

Both men and women own land equally, with many land deeds in the names of husband and wives. Also, land plots for mining purposes are available in the name of women.

In the Amerindian community of Campbelltown, the land belongs to the community where people can apply for the use of land. Once it is in their name, it is almost as if they own the land, and can transfer this land to their children through inheritance, however, the land can never be sold to outsiders.

## Division of labor and housework

Men are increasingly active in housework. However, in many cases, the women are responsible for the housework while men work in the fields. Considering the high number of single parents (some estimated 40%), all work is done by the single parent, being man or woman, although generally the woman remains with the children. Some 80% of the families are broken, which is to say that the husband /father went to work to the mines and decided to start a new family, leaving behind, without responsibility the first family. As such, the woman as a single parent starts living with another man, becoming an adopted family. According to the women, there is no law in Guyana that obligates a man to take responsibility for his family if he decides to leave.

in Campbelltown also both men and women work on the farm and in the house, and sometimes it is said that the women work more than men. Nevertheless, women work more in the house leaving the more physically demanding to the men. Also, hunting and fishing is mainly done by men. Moreover, for the cassava processing, the cassava collected and carried on the back of the person to the processing area, such heavy loads are generally the responsibility of the men. Then women grate the cassava by hand. A community mill would be most useful.

## Leadership and gender

As many women are single parent (acting as mother and father) or the fact that the man in the house is not the father of the children, women are often head of the household making all decisions. In Mahdia center, women say they are head of the family as long as the husband is not there, which is most of the time. However, once the man returns home, the man is the head of the household.

According to the people of Campbelltown, both women and men can be heading the family, making decisions jointly through dialogue; this can be confirmed with the Toshao woman.

## Use of household and electronic equipment

Women in central Mahdia have pretty much all of the regular household facilities such as refrigerator, microwave, blenders, etc. For cooking women use gas, kerosene and some wood. Most people have mobile phones, and television; very few have computers.

In Campbelltown, the few people that have electricity use freezers, TV, iron, fan, stereo. The fluctuation of the electricity, however, does damage the appliances, especially the freezers. Most people have mobile phones, whether they have electricity or not. There is no internet.

## Sources and levels of income

The main source of income is mining. Some men work in logging also. There are several small businesses, mostly shops for food such as supermarket, restaurants and clothing. Also, there are government jobs, mostly clerical, work in the health centers and in the education sectors; many people working as teachers are not from Mahdia. People working for government organizations earn some 60,000 GYD (300.00 USD) per month; although the mining sector does not offer stable income, the potential for high income is there and very attractive. The private sector often pays less than the government sector. As such, many girls and young women work in the night clubs, earning some 10,000 GYD (50.00 USD) per “trick”, where they can perform two to three tricks per night, generating an attractive income when compared to the government or private company salaries. Aside from the Mahdia girls and women, some girls from Venezuela are working in the clubs, being paid less than the locals although they are said to work more.

Men in Campbelltown generally work at the mines; women that work at the mines generally work as cooks. They also generate income through farming, and hunting of wild animals such as wild hogs, bush fowls and deer; they sell on the market to Mahdia residents.

Unfortunately, there are few income generating opportunities for young women and men in Mahdia, resulting in many men working at the mines and women working in the clubs or getting pregnant.

## Household expenditures and economy

The cost of living in Mahdia is very high. One meal for a family of 5 will cost 2,000 to 2,5000 GYD (10.00 USD – 12.50 USD); a plate of rice with a chicken thigh costs 1,400 GYD (7.00 USD). Considering two full meals per day for a family of five, this would mean 600.00 USD – 750.00 USD per month; But there are also other expenses such as electricity, gas, estimated at 5,000 GYD (25.00 USD) per month, thus additional expenses of some 15,000 – 20,000 GYD (75.00 – 100.00 USD) per month, making a required total of 675.00 – 850.00 USD per month only for survival; based on a salary of one person working for the government at 300 USD per month, this means other income generating activities such as agriculture, hunting, mining, etc. is required to meet the end of the month.

It should be noted that there are no banks or ATM machines in Mahdia, this means everything is paid in cash. This generates many problems for government employees who need to be paid through a bank account in Georgetown; most people therefore get paid by cheque. One can notice that most of the population have gold teeth.

In Campbelltown the income is very unreliable, coming from mining, hunting and fishing and agriculture; the monthly expenditure for a family of 5 people is estimated at 50,000 GYD (250.00 USD) per week.

## Capacity building and training programs

The ministry of agriculture offers the tomato solar drying project for fabrication of tomato sauce and related products. It is also testing peppers and cassava processing.

The government offered a training program in Georgetown for high school students of Mahdia. There is also another project for poultry farming (egg production and meat).

There used to be a training and business enterprise organized by the women’s organization “Women with Virtue”, however, the program ended for lack of market study; apparently, they were selling at too high a price. Without additional funding the project stopped. But the women groups continue and is currently under reorganization.

According to the community members, there is a need for kids and youth training, especially regarding technology. At present, the men and boys go to the mines and the girls end up pregnant. Further education and working opportunities are needed.

There is a plan to relocate the primary and secondary schools and use these buildings as a technical institute and tertiary education programs. It has yet to be implemented.

There are no training programs in Campbelltown. There are not NGOs no UN agencies. There are no women’s groups, only the indigenous council.

IDB has a project already implemented in Guyana, the Technical Vocational Education and Training (TVET) which is rooted in Education for Employment. According to an article of the Kaieteur News[[4]](#footnote-4) online of 25 December 2017, “The Government of Guyana has already indicated in its economic development strategy, some degree of prioritizing of these sectors in its overall program. They include: Agro-processing; Timber and Wood Products; Mineral Processing (Precious Stones and Jewelry); Information and Communication Technology; Clean Energy; Oil and Gas; Tourism and Hospitality; Maritime, Road, Air and Other Infrastructural Development”. It may be pertinent to attach the women’s training program to the TVET program.

## Identified social and productive activities

All women-oriented projects should start with a woman empowerment program that would strengthen the woman and girl emotionally. As abuse, rape and incest are rampant yet kept secret, many young girls have babies, not having the knowledge to care for their child and even less the education or skills to earn a proper living. Building on inner strength the young woman or girl can then develop the skills required for a dignified life; “an illiterate mother cannot teach her child properly” so are saying the women of Mahdia.

Community meeting in Campbelltown

1. A halfway house and training center would help in the support and empowerment of the young women in Mahdia.
2. Sewing remains one of the key activities to be formalized and developed but a specific market and feasibility study should be conducted.

There is a project underway financed by the indigenous People’s Affair for a Computer home that would offer 20 computers; Campbelltown already has the building for this project. They are still waiting for the computers and should have access to internet.

In Campbelltown, the community was very specific in its interests, and all are fully supported by the Toshao towards the development of the community:

1. Sewing machines for a community enterprise for making clothing; there is one local young woman who studied clothing design in Georgetown that could lead the group of women in making special clothing with the inspiration of Amerindian culture and tradition for sale and eventual export. The sewing machines can be electrical for the detailed work but some machines can also be manual until there is more available electricity.

Campbelltown community center

1. A Community cassava mil would facilitate the making of cassava flour and cassava bread which allows them to generate additional income.
2. As Mahdia is located not so far from Kaieteur falls (the highest falls in the world), there is potential for tourism. As such, the community could make clothing (as mentioned in the first point), but also expand their making of local beverages, local foods with the opening of an Amerindian restaurant, and offer tours that would include the visit of various waterfalls in the surrounds few kilometers, (plus Kaieteur falls located some 6 hours away by road), forest excursion with specialized guides and identification of wild animal including leopards, deer, wild hogs… and historic sites such as the Denham suspension bridge which dates back to 1933 only few kilometers away, etc. (this is the preferred project of the Toshao as it would allow the community to grow and also includes the sewing project).

Leopard droppings

Denham suspension bridge

Denham suspension bridge

## Conclusion and Recommendations for Mahdia

People in Mahdia have unreliable electricity; only few people in Campbelltown have access to electricity. The night life in Mahdia is generating social problems to a point where the local government is considering moving the schools await from the center. The PV project will certainly help stabilize the electricity in Mahdia and hopefully will allow a reduction in its costs. The identified activities according to the needs of the people are different from people living in central Mahdia and those in Campbelltown. Following are some recommendations:

For Central Mahdia

1. **Counselling and Halfway house**

Many young girls in Mahdia are making a living in the bars. The night life in Mahdia is predominant and men come from the mines with money to spend. This makes the implementation of income generating project quite difficult considering the amount of money a girl can make every night (USD 100 to 150). No small income generating activity can generate as much money and therefore, the only way to implement a training programme for these girls would be starting with a counselling, which could be part of a different project. Sewing could be a skill that can be developed by these young girls.

For Campbelltown

1. **Tourism and hospitality**

Considering the already capacitated persons in hunting, fishing and trekking, what is needed is training in ecotourism which is increasingly popular around the world, thus offering the opportunity for city people to visit nearby waterfalls, trek in the jungle, visit special sites such as the old bridge. This could be developed in close cooperation with the local and central government of Guyana and would certainly contribute to the social development of the community of Campbelltown.

1. **Sewing and clothing design shop**

Design and fabrication of clothing is can be a lucrative enterprise if set up properly. There is currently a high demand for clothing in Mahdia due to the night life, however there can also be a national and international market for special clothes that include Amerindian inspired designs. A market study would be required to verify the logistics of such an enterprise.

1. **Community cassava milling service**

Cassava is a staple crop in Mahdia and as such, not only is the cassava made into flour but it is also used for cooking such cassava bread which in turn is sold for profit. A cassava mill could offer the people of Campbelltown as well as the people of Mahdia a milling service, thus generating income for the community.

# CONCLUSION

The Townships of Bartica, Lethem and Mahdia will genuinely benefit for the project Diversification of the Energy Matrix and Energy Security. Yet women in these three communities need support. The information collected during the interviews could be verified with the following information from UNDP and from the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW).

The UNDP Human Development Report of 2016[[5]](#footnote-5) offers various values regarding gender in Guyana, which help understand the status and participation of women in Guyana and confirm the data collected during the interviews, as seen in the following information.

Guyana has a Gender Development Index of 0.943 placing the country in group 3 where countries are divided into five groups by absolute deviation from gender parity in HDI values with group 1 having High equality and group 5 low equality, which reflects the mixed strong women and those in need of support. The Expected years of schooling for female is 10.5 and for male 10.2 while the mean years of schooling is 8.5 for female and 8.4 for male, reflecting the current situation that although most children should be completing their secondary school, there is a high level of drop out; according to the surveys, most children complete their high school level. This is further confirmed with the population 25 years or older with at least some secondary education is estimated at 68.1 % for female and 53.2% for male. Literacy rate, as such, is reflected showing a 94.8% for female and 94.1% for male.

The Gender Inequality Index Value for Guyana is calculated at 0.508, whereas 1 indicates absolute inequality and 0 indicates perfect equality, ranking Guyana in position 117 out of 188 countries. The level of participation of women in decision making can be seen in the 30.4% of women with a seat in parliament. The labor force of 25 years or older is predominantly male, with a 41.8% for female and 77.2% for male. Income for government workers are said to be equal for men and women, however, the UNDP Index shows that the gross national income per capita for female is USD 4,346 while for male it is USD 9,397, a 115% higher income compared to women. One could assume it is related to the fact that most men work in the gold mines generating higher income.

The birth rate for adolescent young women aged between 15 and 19 is estimated at 88 per 1,000 or almost 9%, which is considerably high, and reflects the social problems presented by the women in the various communities. Another social problem is the suicide rate, which is estimated at 22.1 per 100,000 for female and 70.8 per 100,000 for male, making Guyana with the highest suicide rate among men and among women, and this compared to the other 187 countries listed in the Index. Another social problem in Guyana is domestic violence, which is referred to a Justification of wife beating in the UNDP Index, showing 10% female and 10% male for persons aged 15 to 49,

In 1980, Guyana ratified the 1979 Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), before its entry into force on 03 September 1981, demonstrating its concern for women in the country. As per the terms of article 18 of the Convention, the Ninth Periodic Report[[6]](#footnote-6) was submitted by Guyana on 17 April 2018. The report confirms that there is little difference in the gender distribution of the population; women comprise 50.2 percent and men 49.7 percent. The report states that “Although improvement is needed, women and girls are encouraged to pursue their ambitions, and their achievements are celebrated in the society, community, and village” (p.9).

The participation of women as labour increased from 41.6% in 2011 to 42.9% in 2014, this reflecting the need for women to work as to maintain their family. The participation of men’s labour declined by 1.2% from 81.2% in 2011 to 80.0% in 2014. The report further states that the Bureau of Statistics of Guyana states that the migration within the country is dominated by women and “the preponderance of females in the migration process may be explained by the avocation of gender equality in the country, where women’s traditional role mainly in-home duties has been decreasing, and women are now competing with men in job places”[[7]](#footnote-7).

Moreover, the revised Constitution of Guyana, ensures the principle of equality and non-discrimination, guaranteeing the fundamental rights and freedoms of people living in Guyana. More specifically, The Article 149E of the Constitution “assures women’s equal rights and status with men in political, economic, cultural and social life; their equal access with men to academic, vocational and professional training and equal opportunities in employment, remuneration and promotion and states that all forms of discrimination against women on the basis of gender and sex are illegal” (p.9).

Section 11B of the Representation of People’s Act, Chapter 1:03 allows for the inclusive participation of women in decision-making processes, if at least one-third of the list of representatives of each political party wishing to contest the national and local elections must be women. In the recently held LGE women actively participated as voters and contested seats in the municipalities and Neighbourhood Democratic Councils. Women occupy 33 percent of seats in municipalities compared to 30 percent prior to elections; and women councillors of the Neighbourhood Democratic Councils improved slightly to 30 percent compared to 29 percent prior to elections (p.9).

The report further adds that according to a report issued by the Ministry of Finance in 2011, Guyana has made good progress towards gender equality and empowerment of women and that the country has bet the target of eliminating gender disparity in primary and secondary education, which is confirmed in the UNDP report mentioned previously.

There are currently ongoing policy discussions as to ensure effective implementation of laws that protect women and girls from violence and all forms of discrimination. Initially, a National Policy on Domestic Violence was formulated on the result of a National Dialogue among state and non-state actors during the period 2008-2013, and has now been replaced by the National Plan of Action for Implementation of the Sexual Offences and Domestic Violence Acts 2014 – 2017. Furthermore, an Interagency Task Force developed the National Regulatory Framework on Violence Against Women and other Gender-Based Violence in order to accelerate the implementation of the Policy and Nacional Action Plan. Legal Aid Clinics have been established in five of the country´s ten regions; there are no such clinics in regions 7, 8 and 9 to cater for Bartica, Mahdia and Lethem respectively. Proposals for Mahdia and Lethem are currently under consideration.

The Government of the Cooperative Republic of Guyana (GoCRG) “considers the equal participation of both women and men in all aspects of life and development which is imperative to achieve a just, equitable and prosperous society” (p.14).

Two bodies are responsible for the implementation of policies and programmes in the country: The Women and Gender Equality Commission (WGEC) and the Gender Affairs Bureau (GAB). Regional Affairs Committees were established under the GAB and exist in each of the 10 regions. The Guyana Women’s Leadership Institute (GWLI), under the Director of Social Services of the Ministry of Social Protection is also responsible for the implementation of programmes towards the advancement of women. As such, a National gender Policy is being formulated as to promote gender mainstreaming in public policies, programmes and plans and also to correct offences committed against women and girls in both public and private areas; gender related programmes are to be financed using 1% of the National Budget.

Complementing the Action Plan on counter trafficking (2014), programmes such as the Hinterland Scholarship Programme, the universal school uniform programme, economic assistance to single mothers and skills training for youths were implemented as to reduce poverty, create equal opportunities and reduce vulnerabilities in women, children and indigenous communities.

Currently, the Government of Guyana provides financial support to four NGO managed shelters that provide short-term accommodation, counseling, legal advice and training for women and girls. During the period of 2011 to 2015, some 235 women and 318 children benefited from these shelters. In 2015, eight women from a shelter received training courses towards income generating opportunities in reference to care of the elderly, cosmetology and catering. Moreover, the Government implemented organizations called “White Zones” as to increase the number of safe houses for women and children hiding from abusive homes, offering 24-hour temporary lodging and daily services such as meals, counselling, child friendly environment and other assistance as needed.

In 2011, the Ministry of Social Protection, in collaboration with UNFPA, conducted a survey on the Incidence and Drivers of Gender-based Violence and found that 3 in every 5 women experienced physical violence by an intimate partner, in in every 2 women were sexually abused by an intimate partner and 3 in every 4 women was emotionally abused by their spouse or partner. These data confirm the declarations of the women during the interviews in all visited communities.

Additionally, the Ministry of health of Guyana is trying to deal with what it refers to as an “epidemic of suicides” with an average of 200 lives lost each year; it is estimated that for each lost life, there are 20 to 25 suicide attempts.

Overall, the situation is improving. Guyana achieved gender parity at primary level education while the participation of women increasing in Technical and Vocational Education and Training (TVET), with numbers from 2011-2014 showing 38% female compared to 62 percent males. Women are also very involved in government positions and as professionals including lawyers and judges. Currently, 70% of the students at the University of Guyana are women, a several post-secondary level programmes are offered including: “three Nursing schools; seven Technical/Vocational Institutes in six regions; Cyril Potter College of Education along with in-service teacher training programmes in each region; Burrowes’ School of Arts; Carnegie School of Home Economics; Institute for Distance and Continuing Education; Adult Education Association; Felix Austin College of Police; Guyana School of Agriculture and GUYSUCO Apprenticeship Training Centre” (p.26).

The increased number of women as decision makers can also be seen in Amerindian communities, whereas in the year 2016, of the 116 elected toshaos, the highest representative of the Amerindian communities according to the Amerindian Act 2006, 25% were women. Overall, women are very active in public life and are becoming slowly climbing the corporate ladders in the public and private sectors. What is needed now is the additional support for those women living in more remote areas where electricity is scarce or nonexistent, where training opportunities de develop income generating opportunities can be encouraged with the access of an accessible and reliability electricity, and where communities such as Bartica, Lethem and Mahdia can need the power of electricity towards a sustainable social development and a better future for their families.

# Annex 1. Questionnaire used as a guideline for the interviews.

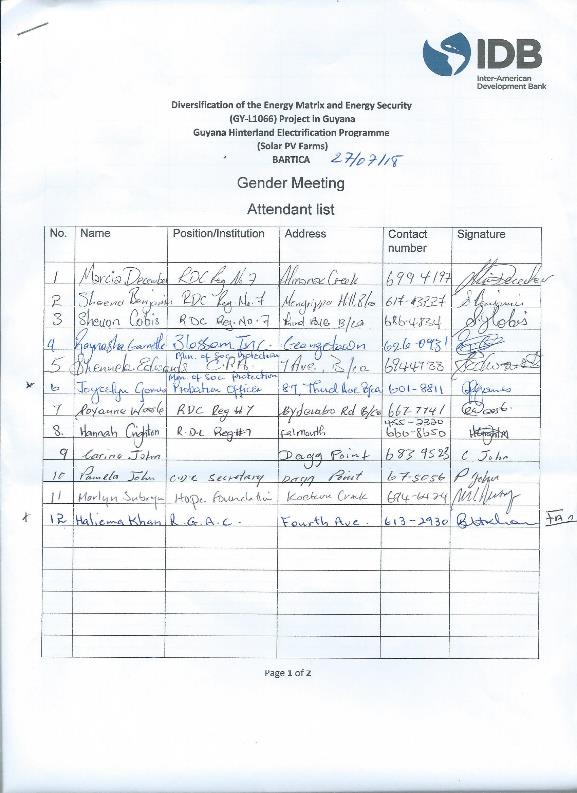
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**Public scoping meeting Diversification of the Energy Matrix and Energy Security  
 (GY-L1066) Project in Guyana  
Guyana Hinterland Electrification Programme  
 (Solar PV Farms)**

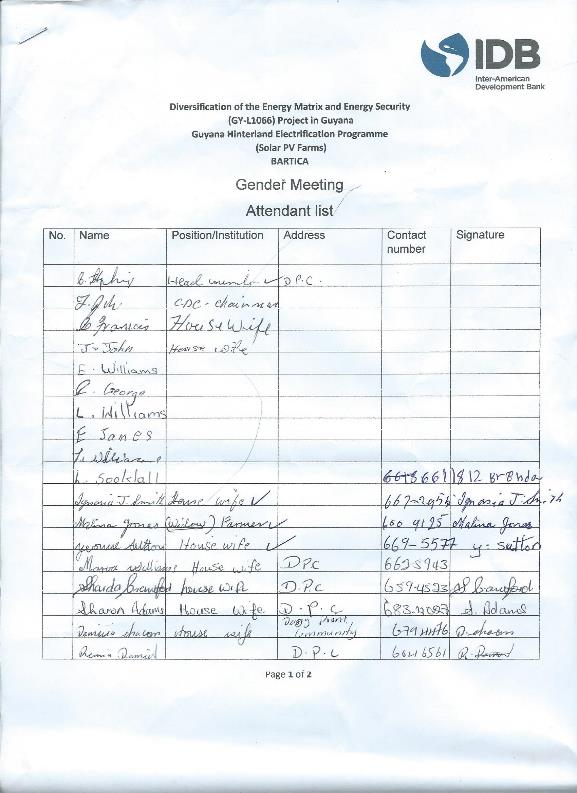
Gender Interview questionnaire

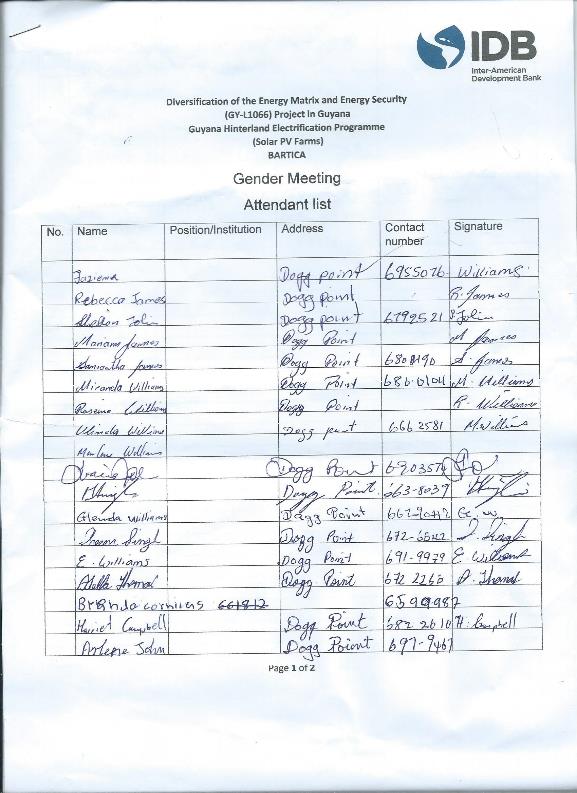
1. How is the climate here? Are there any natural disasters? Has the climate changed in the past so many years? Do you see or feel some kind of contamination in the air? If yes, what is the source?
2. Do you know about the project of installing a solar plant? (Bartica1.5MW within 7.5 acres land; Lethem 1MW within 5 acres of land; Mahdia 0.65MW within 3.25 acres of land). How do you think the project will impact you, your family and the local populations?
3. How many hours a day is the electricity available? Do you have every day? How reliable is the electricity? How much is the light bill every month? What is the cost of electricity per kWh? Do you use your own electric generator to compensate the electricity shortages? If yes, for how many hours a day? How much do you spend on fuel? Do you use fossil fuels for anything else? What do you use it for? How much does it cost? How much do you use?
4. Do you have water facilities? Treated water or pipe water?
5. How many schools are around here? Do they all have electricity? Is it reliable? Do children use computers in school?
6. How many hospitals/clinics/health posts are around here? Do they have electricity? Do they have refrigerators and vaccines? Is the electricity reliable 24 hours per day?
7. Do people cultivate any crops? If yes, what type of crops or in what part of the agricultural value chain (agro-processing) do women and men occupy (if any)? What kind of tools are used for the work? Are they manually operated or electrical or gas or other? Portable or stationary equipment.
8. Do women and men belong to cooperatives or other forms of socio-political organizations?
9. How do women and men participate in community decision-making?
10. What are the common beliefs, values ​​and gender stereotypes about women and men?
11. What is the status of land tenure by gender? Who controls the access or owns the land? What other assets do women and men have?
12. What is the division of labor between women and men, young and senior citizens?
13. Who would you say is the head of the family?
14. How much time do women and men and children spend on housework?
15. What household appliances are used within the household? (refrigerator, stove (electric, gas, wood), oven, blender, toaster, microwave, washer, dryer, vacuum cleaner…) What do you use for cooking (gas, wood…)?
16. Did you have been experienced damage to Household appliances related to the stability and continues supply of electricity.
17. Do men and women use electronic and communication devices? (radio, television, computer, laptop, mobile phones, internet…). Both equally?
18. Who decides on the education of children, the mobility of women and economic activities? (field survey?)
19. What are the main sources of income / productive activity or occupation (for women and men)? How do women and men participate in the economy, formally or informally? What kind of tools are used for your income generation or work? Are the tools operated manually, or using electricity, gas or other?
20. What is the income and salary levels for women and men?
21. What are the levels of education for girls and boys?
22. What are the main expenditures for women and men in the household?
23. Do women and men have bank accounts or other types of financial services?
24. Do women and men have access to agricultural extension services, training programs, etc.?
25. What NGOs, local associations, women groups, cooperation’s, UN agencies, etc., exists in the communities? What do they do or in what type of projects are they involved in?
26. What kind of social and productive activities develop the women organizations?
27. Is there some kind of enterprise you or your organization would be interested in developing or wanted to develop but could not for some reason? Please explain.
28. Is there any current economic activity that can be upgraded/or improved and in which way?

# Annex 2. Attendance list to interview meetings in Central Bartica

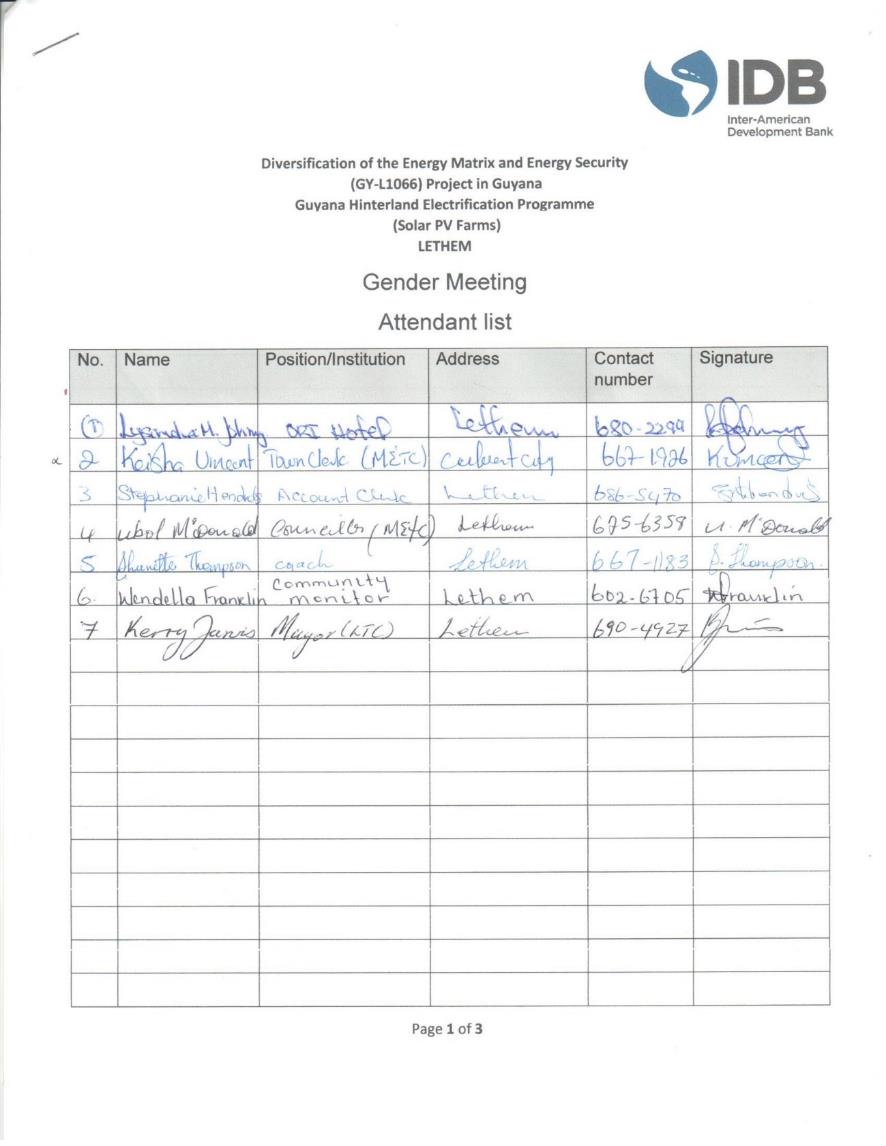


# Annex 3. Attendance list to interview meetings in Dagg Point, Bartica

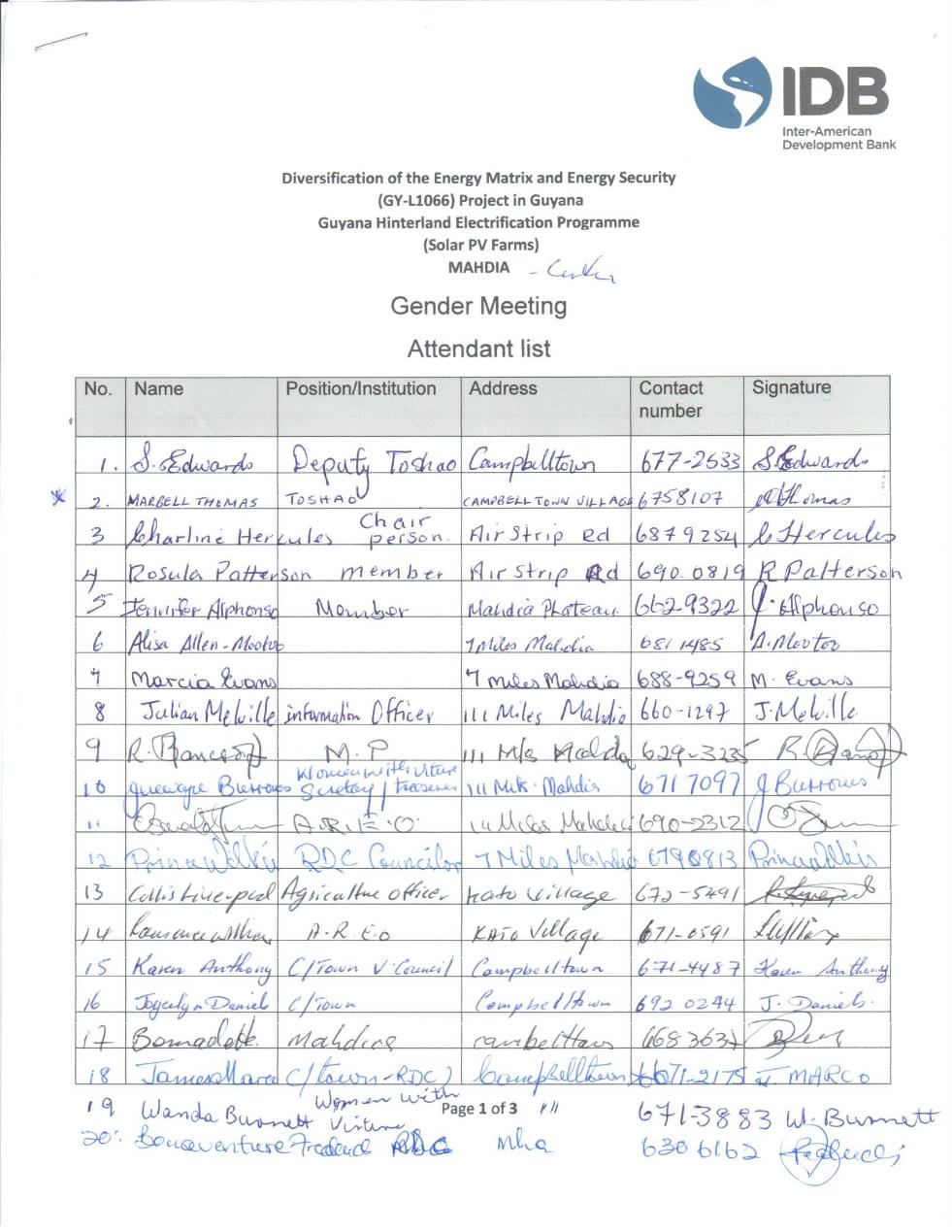


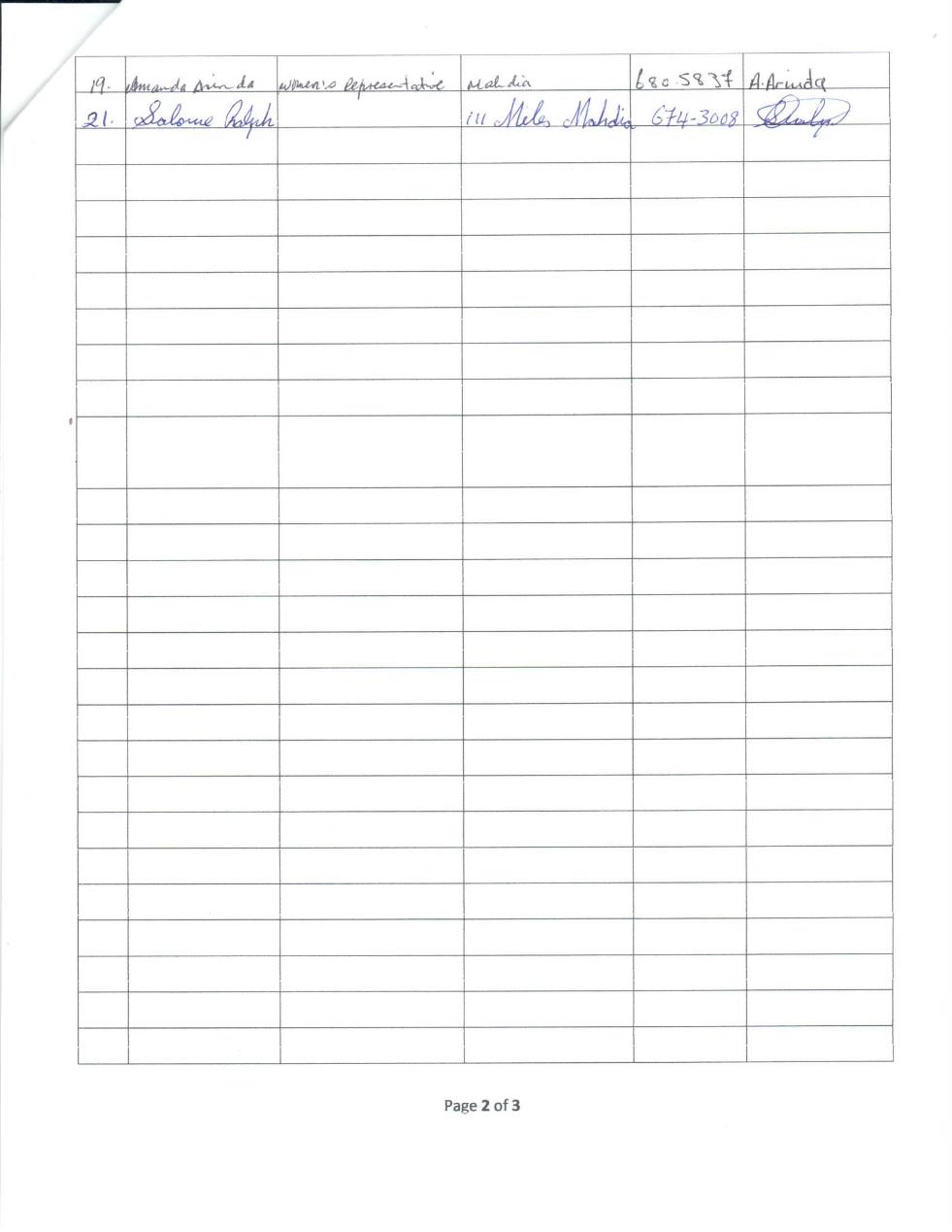


# Annex 4. Attendance list to interview meetings in Lethem

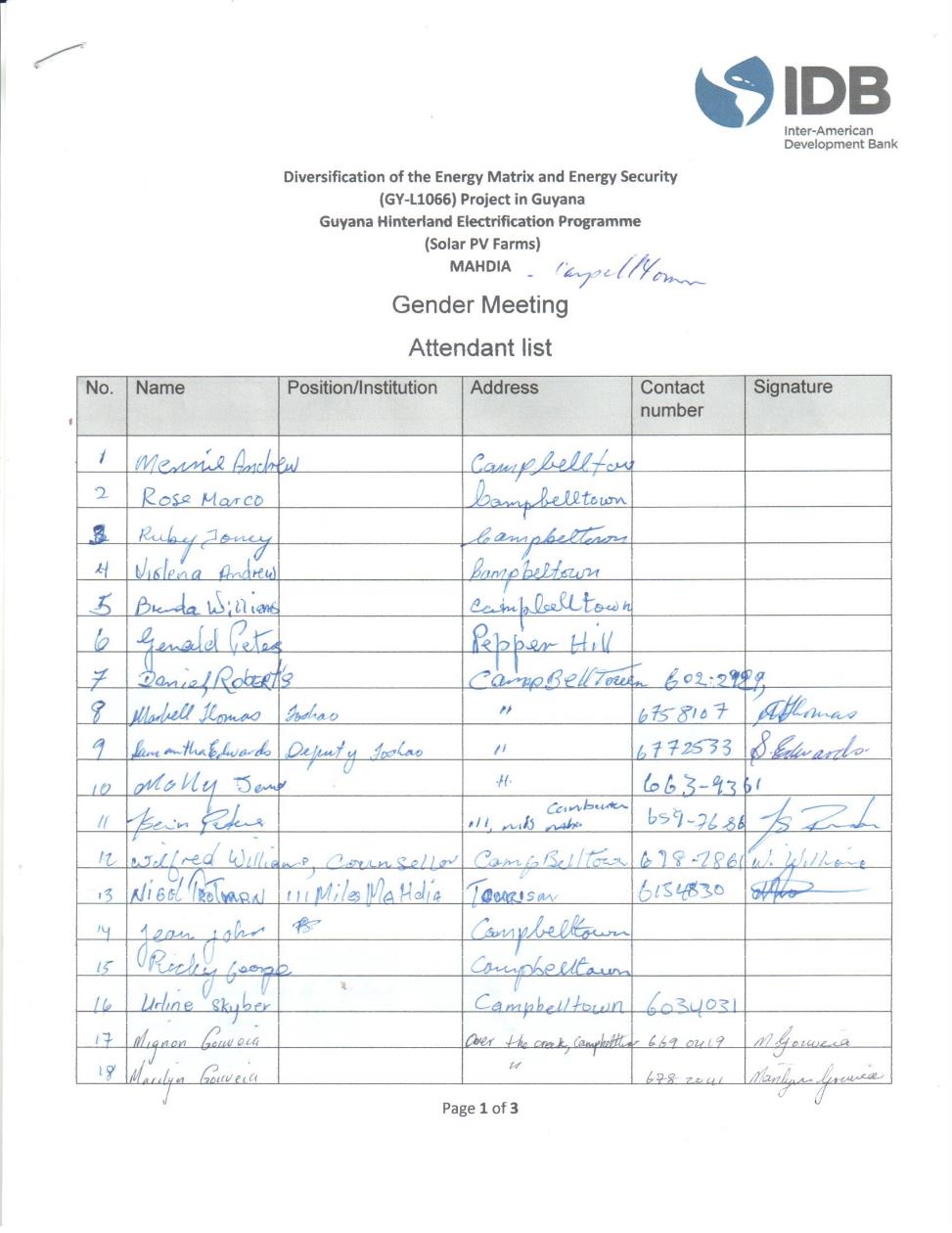


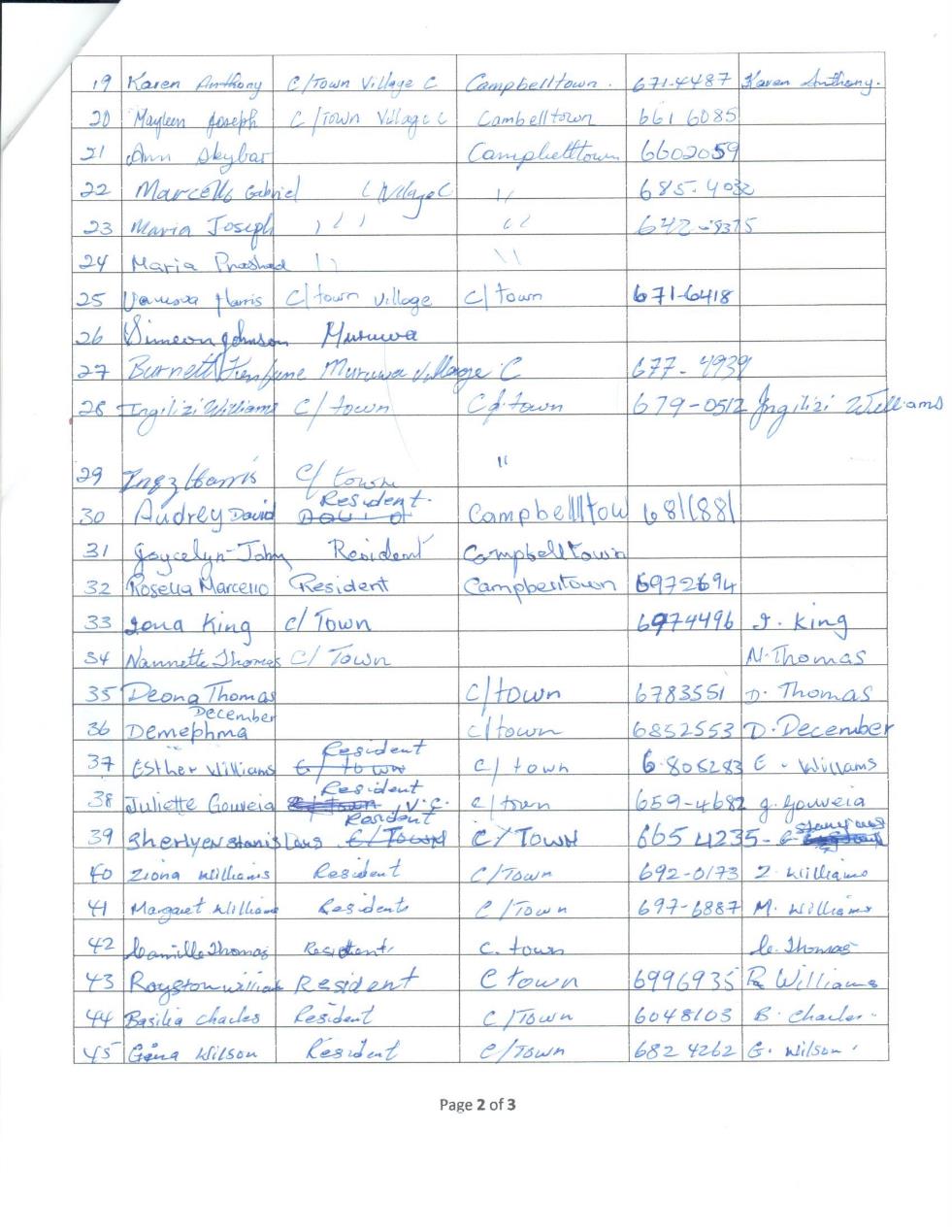
# Annex 5. Attendance list to interview meetings in Central Mahdia

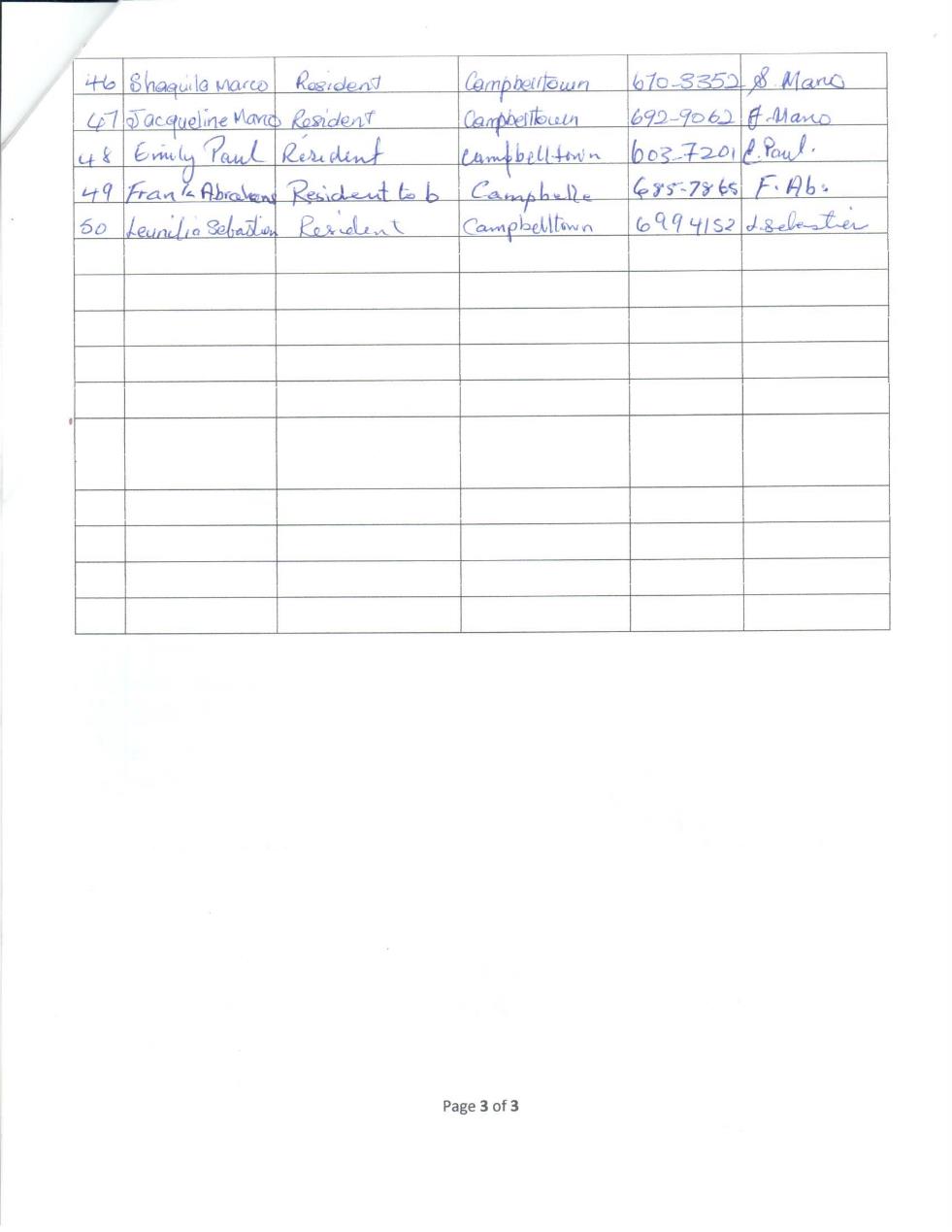




# Annex 6. Attendance list to interview meetings in Campbelltown, Mahdia.







1. UNDP Human Development Index 2016 [↑](#footnote-ref-1)
2. Blanco, Jaime Sologuren. 2018. Natural Gas a Driver for Renewables in Guyana Diversifying the Generation Mix Para El Energia Futuro 2017 [↑](#footnote-ref-2)
3. World Health Organization $ Ministry of Health of Guyana (2014). National Suicide Prevention Plan 2015 – 2020; A National Suicide National Strategy for Guyana. 52 p. [↑](#footnote-ref-3)
4. <https://www.kaieteurnewsonline.com/2017/12/25/council-for-tvet-continues-enhancing-skill-sets-in-guyana/> [↑](#footnote-ref-4)
5. United Nations Development Programme, (2016). Human Development Report 2016 Human Development for Everyone. Washington DC, USA. [↑](#footnote-ref-5)
6. Committee on the Elimination of Discrimination against Women, Government of the Cooperative Republic of Guyana (2018). Ninth periodic report submitted by Guyana under article 18 of the Convention. [↑](#footnote-ref-6)
7. Guyana Population and Housing Census, 2007, (p.61) Bureau of Statistics, Guyana. [↑](#footnote-ref-7)