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Analyzing Job Implications of Climate Change Policies and Oil Discovery: Case Study Guyana

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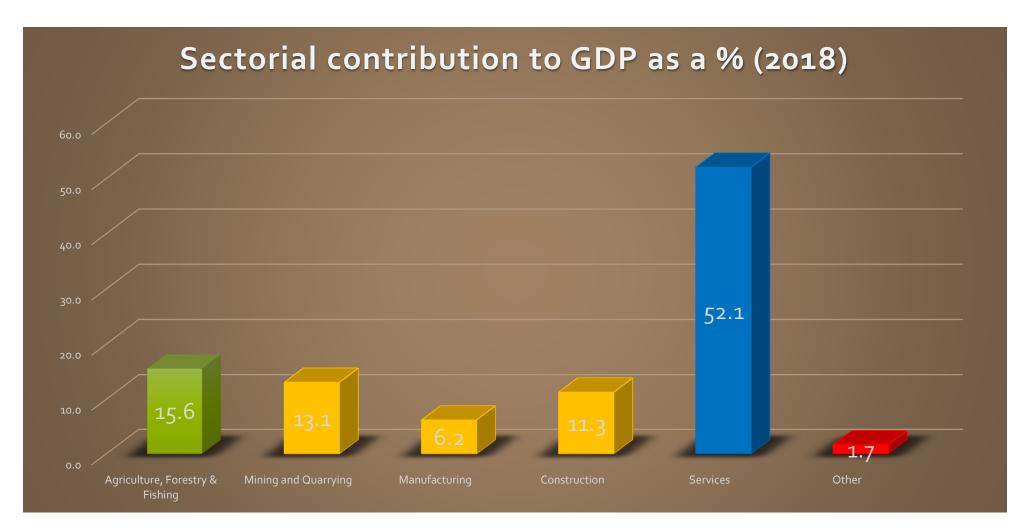
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### An Economic and Social Overview of Guyana's Economy.

#### **Economic Statistics:**

- ► Size: Approximately 83000 sqr miles/ 214000 sqr kilometers
- Population size: Approximately 750,000 persons
- ► GDP 2018: \$3.68 Billion USD
- GDP per capita 2018: \$4906.67 USD
- Economic Growth 2018: 4.1%
- Economic Drivers: Gold, Timber, Rice, Sugar, and Services.
- Natural Resource Endowment: Precious Minerals, Arable land, Forestry, Vast water resource and Oil.

### **Economic Statistics:**



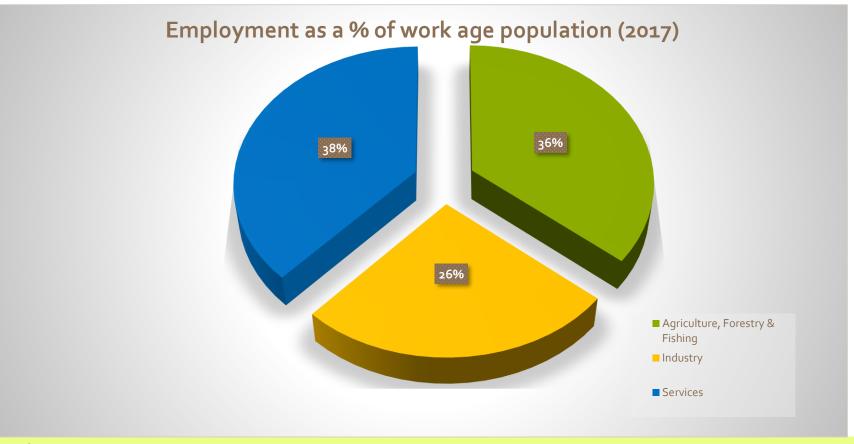
### An Economic and Social Overview of Guyana's Economy.

### Labour Statistics 2017:

- Population size: Approximately 750,000 persons
- Work Age Population (15 years and older): 550,831 persons
- Labour Force Participation Rate: 56%
- Labour Force: 308,466 Persons
- Unemployment Rate: 12%
- Number of Unemployed persons: 37,016
- Minimum Wage: \$64,000 (USD\$ 305)
- Average income for salaried workers: \$82,634 per month (USD \$394)
- Percentage of Work Age Population with Primary Education: 48%







### An Economic and Social Overview of Guyana's Economy.

### Social Statistics 2017:

• Poverty Rate: 36.3%

• Extreme Poverty: 19.1 %

• Life Expectancy at Birth: 68.8 years

• Infant mortality rate 26 per 1,000 live births

• Literacy rate 15 years and older 87.5%

• HDI: 0.654

• HDI Rank: 125

Gender Inequality Index: 0.504

• Gll Rank: 122

• Female Labour Force Participation Rate: 40.7%

• Male Labour Force Participation Rate: 74.6%



### Oil Discovery and Economic Development:

### Guyana's Emerging Oil and Gas Sector

- In 2015 Exxon Mobile announced significant oil discovery offshore Guyana
- As at April 18 2019 the company announced 13 Oil discovery offshore Guyana





### Oil Discovery and Economic Development:

### Guyana's Emerging Oil and Gas Sector

- Total Oil Discovery to date stands at an estimated 6.8 billion high quality oilequivalent barrels.
- First Oil is expected in early 2020 and Exxon is expected to produce approximately 120,000 barrels per day
- Exxon Mobil estimates that by 2025 they will be producing more than 750,000 barrels per day.

### The Economic and Social Implications of the Oil and Gas Sector

History has shown that while oil brings wealth and prosperity, its problematic too.

- Crime tends to increase.
- The economy can become lopsided since many persons would shift their skills to the Oil sector thereby leaving the other sectors underdeveloped.
- Inequality gap often times widens since wages and income in the Oil sectors for many countries are higher than other sectors
- Hosein 2019 estimates that Guyana will need an additional 267 000 persons to supply to its Oil and gas sector base on its size.
  - Considering the sector is highly technical.
  - 48% of WAP have primary education.
  - Foreigners will receive more of the high paying jobs.

### Oil Discovery and Economic Development: Via

#### **Economic Diversification**

"Development can be see as the process of expanding the real freedoms that people enjoy" Amartya Sen 1999.

- The Oil revenue provides another source for Government revenue. With more revenue therefore:
  - Spending to improve Infrastructure across the country will increase.
  - Increase spending on Health and Education.
  - Increase spending on Security
  - Increase spending on Agriculture.
  - Increase spending to develop the ICT sector.
- Employment across sectors is expected to increase.
- This will be backed up by our Local Content Policy



### Benefiting from Oil but avoiding the Resource Curse Problem:

#### **Economic Diversification**

- Promoting Agriculture production and Agro processing activities.
  - Promoting the production of non traditional agriculture (Cash crops, Aquaculture, Fisheries and live stock).
- Growing the Tourism Sector.
  - The tourism sector has enormous potential in Guyana for both income and employment
  - We are seen as an unexplored paradise in South America.
  - We were voted as the Best Ecotourism Destination in the world at the Berlin exhibition March2019.
  - Employment in the sector have been on the increase since 2015.
- Promoting Manufacturing.
  - Currently Manufacturing contributing only 6.2% to GDP
  - Manufacturing has great potential but it is hindered by high cost of production (energy cost).
- Promoting the Energy Sector.
  - Green Sustainable Energy

### From Oil and Gas to Green Development

Oil is a means to an end in Guyana.







## Transforming Guyana"s Economy While Combating Climate Change

- The Low Carbon Development Strategy (2009-2015)
  - In 2009, the people of Guyana set out to prove to the world that developing countries could lead the way towards a better future.
  - On November 9th, 2009, the then President Jagdeo and Norway's Minister of the Environment and International Development, Mr Erik Solheim, signed a Memorandum of Understanding, agreeing that Norway would provide Guyana with result-based payments for forest climate services of up to US\$250 million by 2015, alongside co-operation between the two countries in the fight against climate change, the protection of biodiversity and the enhancement of sustainable development.
  - We are maintaining 99.5% of our forest, and the world's lowest rate of deforestation.
- What have been achieved so far:
  - Hinterland Renewable Energy- at the end of 2013, over 11,000 solar power home systems have been installed in almost 200 communities with 400 mainly Amerindian people trained in their operation, installation and maintenance.

# Transforming Guyana's Economy While Combating Climate Change cont.

- Centre for Bio-Diversity Research and Curriculum Development established at the University of Guyana.
- Climate Resilience and Adaptation:
- Support for MSE and Vulnerable Groups Low Carbon Livelihoods

# The Green State Development Strategy (2015-Present)

- Guyana's Green State Development Strategy is meant to be a national development plan, providing long-term vision and guidance for Guyana's economic, social and environmental development.
- The objective of the strategy is to reorient and diversify Guyana's economy, reducing reliance on traditional sectors and opening up new sustainable income and investment opportunities in higher value adding and higher growth sectors.

# The Green State Development Strategy (2015-Present)

- The target sectors to promote income growth and employment under GSDS:
  - The Energy Sector
  - The Agricultural Sector
  - The Tourism Sector
  - Manufacturing

# Assessing the social impact of our Sustainable Development policies Using the Green Jobs Assessment Model.

• How would we know if our Green policies are effective? (scientifically speaking)



### By Making use of the Green Jobs Assessment Model

The Green Jobs Assessment Model- is a macro-economic modelling framework based on Input-Output Tables (IOT) or Social Accounting Matrix (SAM).

It is used to assess and guide policy decisions.

It Looks at growth and income distribution at the sectorial level, looking at green and conventional industries, households groups and job characteristics



### Guyana is currently at the introductory stage regarding the adaptation and implementation of GJAM.

- In February 2015 a team comprising of members from the University of Guyana, the Ministry of Finance and the Bureau of Statistics received introductory training to the GJAM from the International Labour Organisation.
- We are awaiting a second round of training to build on what we have learnt so far and after which we should be in a position to develop Guyana's GJAM.
- We are optimistic that this will be completed before year end as we prepare for first oil come 2020.

### Guyana is currently at the introductory stage regarding the adaptation and implementation of GJAM.

Information we hope to capture with our GJAM:

- Traditional employment vs Green employment by sectors.
- Percentage of employment with Decent Jobs
- Carbon Emission by sector.
- Green and Gender employment etc.

# Challenges that may hinder the implementation of Guyana GJAM

- Political instability
- Human Capital Constraints

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