



Eritrea:

Policies for Economic Development

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1 Introduction

The purpose of this paper is to provide a general outline and ideas for discussion regarding the economic development of future democratic Eritrea.

This policy paper attempts to identify the root causes of Eritrea's acute economic malaise and suggest policy remedies to rehabilitate the economy and direct it towards a sustainable path of development.

1.1 Background

Eritrea is a small country with an estimated population of 3.5-5.5 million people (World Bank & wordpopulationreview.com, 2021). It is strategically located along the Red Sea with a coastline of 1000 km long and endowed with various marine and other natural resources that could potentially provide its people a decent livelihood. However, due to the prolonged 30 year war of independence and the maladministration of the economy by the Ethiopian rulers, the once well-functioning market-driven economy was decimated. After independence, based on a Macroeconomics Policy Framework designed by the Provisional Government, an implementation process of two major programs, namely, the Economic and Financial Management Program (EFMP) and the Public Sector Management Program (PSMP) was started to rehabilitate the economy of the country. These programs were fully funded and technically assisted by both bilateral and multilateral donors. Unfortunately, these reform programs were also gradually abandoned by the Isaias clique that was saliently establishing absolute power and taking the country in a different direction. At present the Eritrean economy is fully controlled and mismanaged by a totalitarian regime that squanders the human and material resources of the country by waging wars instead of utilizing them to develop the nation. As a result, the economy finds itself in a dismal condition devoid of a skilled youth workforce and investments. After 30 years of independence, the Eritrean people are still living in poverty with a marginal access to food, water, electricity and health facilities. We will mention a few economic data as examples to highlight the negative effects of absolute state control on the economy.

During the peaceful period of 1994-1997 when the state control on the economy was less, World Bank data (data.worldbank.org) shows that the economy grew by an average annual GDP growth rate of 10.92%.

Obviously, such economic growth in a country devastated by three decades of war may not be as impressive as this growth rate shows, but it indicates a remarkable trend of economic growth. This achievement could be explained by two factors that occurred during these periods. First the significant inflow of remittances, investments and expenditures into the economy emanating from Eritreans living abroad; and second inflow of development aid funds from multilateral and bilateral international organizations. International donors were supporting the two above-mentioned institutions and capacity building programs (EFMP and PSMP) which

later were abandoned by the regime. In subsequent years however, i.e., 1998 to 2000 when the Isaias regime took full control of the economy and went to war with Ethiopia, the GDP growth rate went down to 1.77%, and -3.1% respectively (www.data.worldbank.org). Since the end of the war in 2000, the economy continued to perform poorly until the beginning of the Bisha mining production of gold and copper in 2011 where the growth rate rose to 8.68%. During the period of 2011-2014, the Eritrean government received a revenue of \$1.04 billion from Nevsun Mining Corporation (Nevsun, 2014 CRS Report). None of this revenue was used or invested to fulfill the basic human needs of the Eritrean people. The World Bank further reports that from 2015-2018, the economic growth went down to (-2.7%) due to the decline of mining production and drought in the country. The above data show the gross mismanagement of resources by the corrupt and dictatorial regime that has absolute control over the economy and not subjected to any accountability whatsoever. It used public funds to finance its adventurous war against neighboring countries and support various Ethiopian and other armed groups to destabilize the Greater Horn area. As a result, Eritrea now finds itself heavily indebted to creditors; its debt in 2019 was 189.2% of GDP reports the African Development Bank (www.afdb.org). This figure probably will be much higher now with the adventurist engagement of the regime in the Ethiopian civil war. Furthermore, the World Bank reports that Eritrea is in arrears in the payment of the debt services of its loans; consequently, it has been barred from receiving any new loan from the World Bank and the International Monetary Fund (IMF). The Human Development Index (HDI- which measures life expected at birth, number of schooling years and per capita income) for Eritrea in 2019 was 0.459 (1.0 being the best) and it ranks 180th place out of 189 countries, reports the United Nations Development Program (<http://hdr.undp.org>).

In the following sections we will outline economic policy suggestions that potentially can rehabilitate and revitalize Eritrea's economy and take it along the path of a sustainable development that focuses on the safety and well-being of its people. Since an economy is a complex system that contains several subsystems, a sustainable economic growth and development can be achieved only if all sub-systems are linked to one another and work in sync. In other words, a holistic approach should be applied in the design of economic, social and environmental policies. It is also important to remember that Eritrea's economy at present is predominantly based on subsistence agriculture that is prone to threats of unpredictable rainy seasons, encroaching desertification, and locust infestation. Furthermore, legal issues such as land tenure system and property rights should also be considered in the design of policies, because these issues affect economic activities and outcomes.

2. Macroeconomic Policy and Stability

The long-term objective of macroeconomic policy is to stimulate economic growth through fiscal, monetary and exchange rate policies and create an enabling environment for increased employment with price stability. To achieve this goal, the full participation of Eritrean investors at home and abroad, as well as foreign investors is necessary. While deregulation and lifting of government control from private lives of Eritreans and private enterprises are to be immediate first steps, a thoughtful development of legal and institutional framework that create a conducive environment for private capital investment is vitally important. The government should limit its role to basic services such as defense, healthcare, education, infrastructure development, communication, and protection of the environment as well as designing and implementing policies to eliminate poverty and to improve the livelihood of its people. The government should also act in areas where there is market-failure. In some of the aforementioned areas, private enterprises should also be encouraged to participate.

Post People's Front for Democracy and Justice (PFDJ) era should be marked by Eritrean skill formation, skill repatriation, promotion of private enterprises, dissolution of the current ruling party's monopoly on the economy and privatizing those institutions (case in point, Red Sea Trading Corporation), as well as getting the support of international institutions in strengthening the country's institutions for sustainable and equitable development. In today's world Broadband (or high-speed) internet access is not a luxury, but a necessity for economic and human development. Unfortunately, access to broadband in Eritrea is very limited and the adverse impact on the economy is significant. According to Berhane Abrehe Kidane who was once the Minister of Finance of Eritrea and now languishing in prison, in 1997 Eritrea had the opportunity to be connected to the internet through the international fiber-optic line that was being installed along the Red Sea for a reasonable price of \$20 million. The offer was rejected by Isaias Afewerki with the argument that this was a surveillance scheme of western countries; our neighboring countries, Ethiopia and Sudan, however, grabbed the opportunity and were connected to the fiber-optic network (Kidane, 2015). Hence, in post-PFDJ, democratic Eritrea, the availability of internet connectivity in the country is crucial for domestic and international economic activities, education, efficient government administration, and many other public services.

Given the dire conditions the Eritrean people have been subjected for 30 years under PFDJ's absolute rule, the immediate issues in post-PFDJ that need to be addressed are: access to basic services (food, clean water, electricity, and health), limiting the duration of national service and enable the youth to pursue their education, and redeployment of the army to productive sectors. Furthermore, dismantling many restrictive decrees of the current regime that hinder free business activities and entrepreneurial endeavors to establish businesses in various areas and regenerate robust macroeconomic activities in the country. These macroeconomic activities

should be supplemented by sound macroeconomic, i.e., fiscal and monetary policies to guide the economy on a sustainable growth path.

2.1 Fiscal Policy

In a democratic system, fiscal policies are formulated and enacted by the legislative body of the country and implemented by the executive branch through the Ministry of Finance.

The future Ministry of Finance in a democratic Eritrea needs to be tasked with implementing fiscal policies of the government with a clear mandate that is derived from the country's constitution. It also needs to be tasked with reporting its annual activities to the President or Prime Minister, the future legislative body, and the public. The ministry should be tasked with fiscal policy, collection and management of revenues, development and reporting of the country's budget, conducting internal audits of government agencies, as well as formulation and coordination of national economic and financial policies. The private sector in the accounting and auditing industry should be fostered to serve the business community and expand the tax base of the country. The Ministry should create an environment and system where citizens and businesses pay their fair tax share in a timely manner. A culture of paying taxes and demanding accounting from government entities and elected officials should be cultivated. Reforms must be implemented to make the Ministry of Finance and other government institutions transparent to the public and accountable to the legislative body of the country, which is not the case under the current rule of PFDJ. In order to collect adequate revenues and efficiently run the various national tasks of the country, a culture of paying taxes and demanding accountability from government entities and elected officials should be developed.

2.2 Monetary Policy

Although Eritrea became independent 31 years ago, under the rule of PFDJ regime its financial system still finds itself at a rudimentary level just as it was under Ethiopia's administration. Prior to the 1960 annexation of Eritrea by Ethiopia, Eritrea had five banks under Italian colonial rule (Banco d'Italia, Banco di Roma, Banco di Napoli, Banca Nazionale d'lavoro and Casadi Credito), and an additional branch of Barclay's bank was opened under British administration (Ravinder, 2007). At present, Eritrea has only a Central bank (Bank of Eritrea), one commercial bank, one housing bank, one development bank and one insurance company; all are controlled and run by the government. Until 1997, the Ethiopian Birr was used as the main currency in Eritrea. After disputes on trade and currency related issues among others with the Ethiopian People's Revolutionary Democratic Front (EPRDF) led Ethiopian government, in 1997, the PFDJ regime prematurely introduced Nakfa as the currency of Eritrea causing adverse effects on the Eritrea economy. Under the EFMP, preparations were underway to build capacity and data collection system within the Bank of Eritrea for the purpose of managing the monetary policy

of the country. Unfortunately, this effort was stalled by the obstructionist actions of PFDJ regime and the 1998-2000 military conflict with Ethiopia. Hence, until today there is no well-designed monetary policy in Eritrea.

In post-PFDJ democratic Eritrea, the primary task should be to build the capacity and data collection and management system in the Bank of Eritrea (BoE) and the existing financial institutions in order to lay down the foundation for the formulation and execution of sound monetary policy. Furthermore, the legislative body should empower the central bank (BoE) to be independent of the political forces in the country to pursue its mandate of price stability (combat inflation and deflation) by employing its monetary instruments (minimum reserve requirement, discount rate policy and open market policy). To create efficiency and effectiveness in the financial system, initially the system should be open for domestic investors to invest in the existing financial institutions and to establish new banking and insurance companies. However, to implement a sound monetary policy, a well-developed data collection and analysis system is necessary. Other secondary objectives such as combating unemployment and stimulating economic growth could be explored as well. Uncontrolled inflation is particularly disruptive to economic activities of the country and the central bank should control the quantity of money in circulation by using the appropriate instrument to tame inflationary and deflationary pressures. As a country with less developed financial markets, Eritrea does not have some of the advanced tools mentioned above that are needed to combat inflation; however, using credible and well-communicated policy goes a long way in combating inflationary pressures. Moreover, the central bank must be transparent and regularly publish economic data and provide economic analysis with periodic monetary policy and financial stability reports. In addition, understanding that vibrant commercial and non-commercial banks are the cornerstone of the economy, a well-thought policy that allows the participation of private financial institutions, both domestic and foreign, should be drafted soon after the current regime is changed. The central bank has a critical role to play as a regulator of those institutions. Development of a well-functioning and well-regulated financial system is a strategic area where collaborating with international institutions and seeking technical assistance could go a long way.

2.3 Exchange Rate Policy

Given the sizable Eritrean diaspora and the existence of successful businesses outside the country, it is natural to expect some form of repatriation of Eritrean human and financial capital to the country in a post-PFDJ era. As such, the exchange rate policy of the country should be set with the objective of fostering economic activities, attracting private capital, and developing export-oriented businesses. A managed exchange rate could be the appropriate policy that promotes these objectives.

3. Development of the Financial Sector

A Financial Sector is vital in the Economic development of a country. It is through the intermediation of financial institutions and financial markets that surplus funds from savers are transferred to investors and borrowers who engage in business activities that foster economic growth. A healthy financial system encourages savings by rewarding interest earnings and provides capital in the form of loans to investors in different sectors that could lead to economic growth and development. Hence it is important to develop a sound and trusted financial system that operates under a legal framework that secures citizens' savings and investments of all actors in the financial market. Given the current dismal condition of the financial institutions in Eritrea that have been mismanaged for 30 years, the primary task is to undertake reform and capacity building in the existing financial institutions as mentioned above. Eritrea should have a competitive and well-regulated financial system that gradually permits foreign banks entry. To this end, the establishment of task forces mandated with developing a comprehensive regulatory framework for the Central Bank, commercial and non-commercial banks, insurance companies, pension companies, microfinance institutions, mobile and digital banks operators, and capital markets is important. Moreover, the introduction of a new mobile digital payment system should be considered to promote efficient economic activity in urban as well as the rural areas.

3.1 Capital Market

Capital markets are vital in providing the population with a means to invest in successful businesses and in turn providing capital to firms for long-term growth and expansion. Once sufficient financial infrastructure and capacity have been built in the financial system, an Eritrean Capital Market authority can be established with the objective of listing stocks as well as public and private debt instruments. Capital markets could also provide the central bank with another tool to rein in inflation by manipulating interest rates. This is an area where a task force could develop a legal and institutional framework for the establishment of security markets and commodities markets in Eritrea. It is also an area where collaboration with and technical assistance from free market economies can be obtained.

3.2 Financial Inclusion and Digital Payment System

A financial system that is easily accessible to all urban and rural residents of Eritrea is vital in fighting poverty and elevating the living standard of the population.

Therefore, in the design of financial policies, a conducive environment for a broad range of low-cost financial services to households across Eritrea should be considered. Developing a national payment system framework and strategy is also important for financial inclusion and financial development. Establishment of a payment system that initiates and increases the use of debit and credit cards, point of sale terminals, Automated Teller Machines, and other digital payment platforms should be part of the financial development strategy.

Furthermore, the financial services may include mobile money transfers, mobile and internet banking, agent banking, and microfinance. To encourage major players in the region that have experience in these areas to invest in Eritrea, an inviting legal framework should be developed. New technologies such as mobile money transfers, mobile and internet banking, and agent banking have shown significant transformation in the methods of payments of business transactions and the processing of international remittances. The good example from the sub-Saharan African countries are Rwanda, Kenya, Uganda, and Tanzania.

In general, a more inclusive and very easy payment system and the network has the power of stimulating the economic activity of a country, alleviating poverty, expanding the country's tax base and increasing the revenue to be collected by the government.

4. Privatization and Deregulation

Eritrea's economy is more of a planned and strict command economy dominated by state or state sponsored PFDJ enterprises. The government owns and operates most of the industries in the country and great majority of the labor force is employed by the state. All sectors of the economy have been severely impacted by the ruling party's poor regulations and economic policies. The Eritrean government has not implemented specific measures that would truly reform the command aspects of its economy, nor has it taken steps to loosen business practices or correct macroeconomic imbalances since independence. On the contrary, it increased and tightened the government's control on the economy.

To rehabilitate the economy and lead it into a sustainable growth path, Eritrea needs to introduce a mixed economy policy to involve domestic private sector enterprises in financing, operating facilities engaged in building, in producing, and transporting goods and services for internal and international markets. This entails the privatization of the PFDJ-state owned and controlled firms. Privatization of the Eritrean economy can be achieved by (i) developing new private sector facilities; (ii) transferring, partially or totally, the government-owned enterprises to the private sector; or (iii) contracting out or leasing the publicly owned asset to a private firm for operation and management. The many enterprises that are owned by PFDJ should be sold or auctioned to private entities. The optimal mix of public and private sector participation in an economy rests to a large extent on the willingness of policymakers to rely on market-determined prices for evaluating the options. Subjective assignment of costs and benefits on national grounds of independence, self-reliance, and security would introduce distortions into the evaluation and lead to a suboptimal mix in the productive activities of the two sectors.

The process of privatization requires the creation of regulatory institutions to establish the pricing, entry, and competition pertaining to the public and private sectors. The post-PFDJ Eritrean government needs to put in place robust, sound legal frameworks to support producers, consumers, and government entities in resolving conflicts and seeking recourse in an orderly, expeditious, and efficient manner. Regulators for the various sectors should be independent of government agencies, with regulatory bodies staffed by experts.

Policymakers must be concerned with the social impact of the structural changes in the economy and prepare mitigating measures. The restructuring of various sectors to realign the responsibilities of the public and private sectors involves decisions on the use of factors of production that will inevitably result in labor redundancies. Policies to mitigate these negative social effects should constitute any program for deregulation and privatization.

Considering the current status of the Eritrean economy, most of the public sector services, such as electricity, water, transportation and telecommunication can be continued as state owned enterprises (SOE), but the door must be gradually opened for the private sectors to enter into these business areas. Government ownership or oversight is a key in the energy sector, including oil, gas and minerals exploitation.

5. Industrial, Trade and Investment Policies

5.1 Industry in Pre-Independence Period

Economic growth is fundamental to economic development. Without generating greater output and income, a country cannot resolve poverty, unemployment, and other social and economic problems. Eritrea was once considered one of the top industrial countries in Africa. The Italian colonization brought both exploitation and modernization into Eritrea. The Italians generally organized the Eritrean economy according to their own needs. They opened few banks, established a few manufacturing units and horticultural estates until the end of the Second World War. In 1946, the British began to dismantling and transferring many industries by selling off and scraping important infrastructure installed by Italians. After Ethiopia annexed Eritrea in 1962, Eritrea's economic growth slowed down because of Ethiopia's adverse policies. The expansion of existing enterprises and investing in new ones were totally discouraged. Subsequently, the relocation of Eritrean firms into Ethiopia was carefully executed, while skilled Eritrean labor was exiled to Ethiopia and other parts of the world.

5.2 Industry and Trade in Post-Independence Period

After the 1991 Eritrean independence, the expansion of industrial manufacturing has been totally halted due to the failure or unwillingness of the PFDJ regime to implement the Macroeconomic Policy Framework which called for the transition into a mixed economy. Later, due to the 1998-2000 border war with Ethiopia, Eritrea's

economic growth went down. The PFDJ regime tried to create two designated Free Trade Zones and an international airport in Massawa, but none of these has begun to function.

The current regime maintains strict control on foreign exchange reserves, given the inability of raising foreign currency through exports or on international capital markets. Although this has reduced the gap between the official and informal exchange rates, it also has a severely negative impact on freedom of trade and the vibrancy of the country's economic development. An Eritrean citizen is allowed only \$5,000 Nacfa (~ 330USD) to withdraw money from his/her own bank account per month. This restriction hinders small businesses and trade activities and resulted in poor economic development. The three major government owned banks: the Bank of Eritrea, the Commercial Bank, and the Commerce and Housing Bank operate without adequate accountability or transparency. Eritrea imports 90% of its cereal consumption, (source: www.lloydsbanktrade.com/), whereas agricultural exports (mainly livestock, cotton and leather) depend on climatic conditions and underdeveloped irrigation systems. The country mainly exports minerals (zinc, copper, gold) and textile products and primarily imports capital goods, oil and food products.

Eritrea is not a part of any regional economic blocs, nor is it a member of the World Trade Organization (WTO). Eritrea is facing a widening trade deficit, as the country is dependent on imports for food, capital goods (which are increasing with construction projects), and oil (whose price is rising). In 2019, Eritrea's exports of goods amounted to USD 744 million, whereas imports of goods reached around USD 1.15 billion, (source: <https://www.worldbank.org/>) resulting in a large trade deficit. In 2020, due to the impact of the COVID-19 pandemic, global trade volumes declined sharply. Eritrea's mining export fell while food imports increased due to the locust invasion and shortages of rainfalls. Most of the country's workforce is deployed in military service and is unproductive.

5.3 International Trade Policy

International trade policies are targeted directly at imports and exports such as import tariffs and quotas and export taxes and subsidies. Post-PFDJ, the question to Eritrean policymakers is not how fast the economy can industrialize, but how to structure the industrial and manufacturing sectors as a system of forward and backward linkages that leads to sustained economic growth and development. In general, countries that are open to international trade tend to grow faster, innovate, improve productivity and provide higher income and more opportunities to their people. Although regional and international trade present new opportunities to developing countries like Eritrea, it is not without challenges. Eritrea does not have adequate systems of transportation, logistics, customs administration, telecommunications, financial markets and information technology. These infrastructure problems along other regulatory obstacles, and the increasing complexity of trade create serious implications for Eritrea. As a result, Eritrea now finds itself totally disconnected from global and regional

markets; and unless these issues are resolved, Eritrea will continue struggling to compete on a regional and global scale. However, in the long run, given its strategic location for accessing markets in the Middle East, Africa, Asia and Europe, Eritrea has a good potential to have a comparative advantage in trade.

In post-PFDJ, to actively participate in international trade effectively, the new government needs to design and enact policies that promote human resource development, capacity building in all trade-related institutions, physical infrastructure, manufacturing, and internet connectivity. Once these are in place, Eritrea can use its two ports to trade with neighboring countries in Africa and the Middle East. Under a new government Eritrea should come out of the isolation imposed by the current regime and actively participate in the Common Market for Eastern and Southern Africa (COMESA) and join the African Continental Free Trade Area (ACFTA). As of May 2022, there are 54 signatories, of which 43 (80%) have deposited their instruments of ratification. Additionally, one country (Somalia) has completed its domestic ratification, but not yet deposited their ratification with the depository. Eritrea is the only AU member state which has not signed the agreement (<https://au.int/en/>). Moreover, the new government should explore ways of taking advantage of the African Growth and Opportunity Act (AGOA), a tax-free export of products into the United States, offered to selected Sub-Saharan African countries by the US government. Since the current regime in Eritrea is undemocratic with a bad record on human rights and controls the whole economy, Eritrea is not one of the beneficiary designated countries of AGOA, because it does not fulfill even a single criterion of the eligibility requirements. In post-PFDJ, this should not be an issue; since our objective is to establish a democratic Eritrea with the rule of law and mixed economy where the private sector plays a major role in the economy of the country. Eritrea should also adopt a less restrictive industrial and trade policy that creates a free-market environment to promote economic growth and earning of foreign exchange.

5.4 Investment Policy

At present, the investment climate in Eritrea is not attractive to local investors, Eritreans in diaspora, and foreign investors. The only area open for foreign investors is the exploitation of mines, because the regime needs foreign exchange funds to finance its lust for endless wars. Although, the 1994 Macroeconomic Policy Framework of the Provisional Government of Eritrea called for the creation of a mixed-market economy where private investors could play a major role, in practice the PFDJ regime created obstacles that discourage and hinder private investments. It gradually took absolute control of the government and directed the economy in the opposite direction i.e., into a state-controlled one. In 1995-1997 many Eritreans from overseas as well as foreigners were flocking to Eritrea to invest in various areas, but they were turned off by the bureaucracy and obstacles of the Investment Center and they left Eritrea to invest elsewhere in Africa. Around 1997, it became clear that the so-called Provisional Government was shutting down all avenues for private investment and

increasing the state's control on all sectors of the economy. They even began making public statements hostile towards the free market and privately owned enterprises.

Now, Eritrea is ranked 189 among 190 economies in the ease of doing business, according to the latest World Bank annual ratings (<https://data.worldbank.org/>). Most enterprises are state-controlled or run by the sole political party PFDJ. While no sectors of the economy can be described as open to Foreign Direct Investment (FDI), the Eritrean government has permitted very few foreign investments in textiles, housing construction and mining. The Investment Center was operating directly under the Office of the President and there is no transparency and accountability in its activities. It is moved to Ministry of Trade in 2003. The few large-scale foreign direct investment in mining is part of a political process and is managed by agreements negotiated directly with a small group of officials in the ruling party. The government received its 40% share between 2011-2014 from mining sales of Gold and Zinc and other indirect revenues which in total are around 1 billion dollars from Nevsun, the mining company (<https://tesfanews.net/tag/csr-2014-report/>). However, there is no information on where this money went. One thing is clear, the Eritrean people have not received any benefit from this public revenue that can change their daily lives.

Post-PFDJ, the new government needs to look at the different policy areas affecting investment which include investment promotion and facilitation, competition, trade, taxation, corporate governance, finance, infrastructure, developing human resources and policies to promote responsible business conduct. Major reform in these areas will encourage local entrepreneurs, foreign investors and members of the Eritrean diaspora to invest in Eritrea. The government must design, develop and implement policies to create a truly attractive, robust and competitive environment for domestic and foreign investment. Furthermore, the post-PFDJ government should be engaged in regional economic co-operation and international policy dialogue on investment.

5.5 Recommendations for trade and industry policy frameworks:

Trade policymaking is a challenging task in all countries and presents especially great difficulties for officials in developing countries. To make trade policy, the interests of consumers and producers must be balanced while the goals of the most efficient and export-oriented industries must be weighed against those that are still struggling to achieve competitiveness. Eritrean policymakers always have to reconcile the fiscal needs of the government treasury with the potential for job creation when deciding what trade agreements they are prepared to negotiate, and what sort of tariff concessions they are willing to make. The following are the key recommendations for trade and industry policy:

- a) The post-PFDJ new Eritrean government should create an enabling environment by ensuring macroeconomic stability, strengthening the institutional and regulatory framework, intensifying human resources development, enhancing technology and investing in infrastructure.
- b) A market-driven, development-led, sustainable trade policy that can stimulate economic growth, reducing poverty and improving living standards through diversification and structural transformation leveraging on mining, fishery, tourism and agriculture.
- c) The fuller participation of stakeholders and civil society in policy-making, the upgrading of the current Ministry of Trade and Industry, and other institutional reforms.
- d) A strategic trade policy to support industrial sectors and recommendation of agreements that support diversification and value addition, reformed services regulations to strengthen domestic competitiveness, regional integration to leverage more on regional trade and encouragement of foreign investment mainly through partnership.
- e) Industry and Trade Development Board or Council be set up at the senior policy-making level to serve as the governing and coordinating mechanism under which inclusive decision-making would take place to formulate, adjust and implement the development-oriented trade policy.
- f) The private sector is the ultimate beneficiary of trade policy and should be involved as much as possible in its development and execution. Businesses are often the most important source of information on other countries' trade barriers, apparent violations of trade agreements, and related matters.

6. Human Resources and Workforce Development

Human capital plays a central role in the economic development of a country, because it consists of two vital components of development, namely, education and health. Both have significant impact on innovation, production and productivity. That is why it is crucial to have a well-designed human resources development plan that produces a healthy workforce that is equipped with various skills relevant to the economy. Many African countries spend a significant portion of their budget on education that is primarily focused on academic achievement and less on skills development. As a result of this, many school leavers and graduates cannot find jobs and become unemployed. Hence, to produce productive youth equipped with skills that match the demands of domestic and foreign investors, the demand of contemporary and future technology, a two-tier educational system that combines academic-oriented education and vocational training in various technical and commercial areas should be designed. This approach has been applied in some developed countries (e.g. Germany and Scandinavian countries) and has shown positive results and it can also be adopted in future democratic Eritrea. Unfortunately, after the downfall of the dictatorial regime, Eritrea will face a huge shortage of well-educated

and skilled workforce that was created by the irresponsible militaristic policies of the current regime. These were caused by the endless national service that forced thousands of young Eritreans to leave the country and by the forced conscription of thousands of men and women into the army for senseless wars against neighboring countries. Furthermore, the shortage was exacerbated by the closure of the University of Asmara in 2006, the only high academic institution in the country that was producing highly qualified graduates that could have made valuable contributions to the development of the nation by engaging in research, management and teaching. Unfortunately, we see many Eritrean professionals in various fields working in the US, Europe and the Middle East that unwillingly have become victims of the phenomenon of “brain drain”. To ameliorate this problem of workforce shortage that Eritrea will face after the downfall of the regime, we propose two projects: (1) to create a database of Eritrean professionals living abroad that could be tapped later, (2) develop projects in each country (US, Europe) to help the Eritrean youth living in these countries obtain some skills through vocational training by collaborating with their host countries.

Eritreans whose talents and capital could have transformed Eritrea’s economy and infrastructure, are denied their basic freedoms to realize their dreams at home. They are forced to choose exile instead. As Eritrea’s economy and infrastructure continue to decay, these reluctantly exiled Eritreans are demonstrably transforming the economies of their host countries. This is a missed opportunity for Eritrea. Credible data about Eritrea and Eritreans is hard to get, because everything is a secret for the secretive regime and there is no coordinated effort to fill the gap in the diaspora. But out of the estimated up to a million diaspora Eritreans, there are probably about 100,000 highly skilled professionals and business people working in various countries around the world. By denying them the opportunity to realize their dreams at home, Eritrea is throwing away 100,000 person years of productivity every single year. For Eritrea to prosper, the new Eritrea must commit to human-friendly policies to stop such bleeding. On the contrary, it should devise policies that incentivize the return of professionals and skilled Eritreans through mutually-beneficial programs with the host countries many Eritreans have settled in.

7. Tourism and Hospitality Industry

Many developing countries have recognized the advantages that international tourism play in economic development and accordingly they have taken actions to develop their tourism industries. According to several studies (e.g., Dieke, 2020; Jenkins, 2015; Sharpley & Teffler, 2015; UNWTO, 2015), the major advantages of tourism can be summarized in the following areas: earning of foreign exchange, government revenues, creation of employment opportunities, creation of business opportunities, and generation of income. Furthermore, other

studies assert that tourism fosters backward-economic-linkages to labor-intensive production services, encourages domestic and foreign investment, infrastructure development, and human resource development. To have some perspective on the economic benefits of tourism, the World Travel and Tourism Council (WTTC) reported that in 2019 the tourism industry in Africa contributed US \$169 billion to Africa's economy, which is 7% of its GDP, and it employed more than 24 million people. Although tourism makes positive contributions to economic growth as mentioned above, the experience of some developing countries shows that if tourism is not planned correctly, it can also have adverse impacts on the culture, historical heritage and the conservation of the environment of the host countries. Hence in developing a sustainable tourism industry in Eritrea, a thorough assessment of all these factors must be included in the early planning phase of the program in order to have a holistic approach that has clear objectives on the outcomes of the projects.

Our preliminary research indicates that a significant number of studies on tourism development in Eritrea, along this line, have been conducted by both Eritrean researchers (e.g., Aman Haile et al., 2017; Bahta, 2003; Ghebreyohannes, 2008) and non-Eritrean scholars (e.g., Burns, 2000; Dieke, 2020). However, although the effort to develop tourism in Eritrea started in 1993 with a government sponsored national conference on the subject and many studies were presented in the conference. After the conference, no viable action was taken by the government. Now, thirty years later, tourism in Eritrea still finds itself at a rudimentary stage, although the country possesses a 1000 km long attractive coastline along the Red Sea, over 200 islands with exotic marine resources, various historical heritage sites, coral reefs and diverse cultures. Given all these natural endowments, Eritrea has great potential to be a very attractive tourist haven and build a tourism industry that creates employment and business opportunities for its people and further fosters economic growth and development by its impacts on the other sectors of the economy.

8. Small and Medium-sized Enterprise (SME) and Entrepreneurship Development

Small and medium-sized businesses account for most businesses worldwide and play an important role in job creation and economic development, particularly in developing countries. They represent about 90% of businesses, and to more than 50% of employment and contribute up to 50% of GDP (worldbank.org). Even in the developed countries SMEs make significant contribution to the economies of their nations. For instance, according to the US Chamber of Commerce Foundation, small businesses account for three-fourth of all new jobs created in the USA, and embody the spirit of innovation, entrepreneurship, and individual initiative (uschamberfoundation.org). Hence supporting SMEs and entrepreneurship is critical to driving economic

growth, job creation, inclusiveness, and sustainable development by unleashing individual initiatives in all countries. However, in many developing countries SMEs are not well-developed because they face many obstacles which hamper their growth and development. The obstacles range from lack of business management know-how, lack of access to business loans, lack of access to markets, and to technology. Moreover, many micro- and small businesses in many developing countries including sub-Saharan nations, operate in the informal sector which further exacerbates the problem of access to the resources mentioned above.

In Eritrea, until the mid-1970s there were a few well-functioning small-and medium-sized manufacturing companies such as brewery, glass and plastic firms and many producers engaged in making leather and textile products as well as few horticultural enterprises. The origin of these businesses goes back to the Italian colonial rule of the country. Although they were predominantly owned by Italians, they offered jobs, skill development opportunities to Eritreans, commerce and some export activities to the economy. In 1974, a military junta took power in Ethiopia and nationalized all private companies in Ethiopia and Eritrea all in the name of building a socialist society. However, due to bureaucratic and poor management, the SMEs in Eritrea were not as efficient and productive as in the past when they were privately owned. In 1994, the then Provisional Government of Eritrea declared Macroeconomic Policy Framework to privatize most of the SMEs in order to play major roles in the development of the country's economy. Unfortunately, due to lack of sufficient capital, management experience or government interference, almost all these businesses have withered away except the Asmara brewery which produces beer of much lower quality than its predecessor Mellotti beer.

Besides these SMEs in the manufacturing sector, there are many individually run small businesses in Eritrea such as taxis, restaurants, bars, printing services, photo/music shops, cafes, clothing stores, producers, and sellers of various food items in markets as well as artisans. Some of these are formally registered and belong to the formal sector, others are not. However, all these small businesses face the same obstacles to growth and development faced by many small businesses in other developing countries mentioned above. The obstacles range from lack of business management know-how, lack of access to business loans, lack of access to markets, and to technology. Eritrea can learn from the experience of other developing countries in ameliorating these obstacles. Hence, in post-PFDJ democratic Eritrea, supporting small and medium-sized businesses is of paramount importance for the people-centered sustainable development of the economy. Small businesses create jobs, provide various products and services to the people, and they can also serve as providers of various input materials to larger manufacturing firms domestically or overseas.

9. Key Infrastructures for Sustainable Economic Revival and Development

Eritrea is one of the poorest nations in the world. The 2019 Index of Economic Freedom lists it under the “*repressed*” category; ranked at 177 out of 180 countries. The challenges are many and compounding, the most serious of which is, the continuous loss of the most productive segment of its population to exile. But the group that has been sinking the country to deeper levels of poverty since 1991 is aging and dying, leaving an uncertain future behind. This opens a small window of opportunity for national revival. Given its small population, strategic location, and its untapped but extensive marine resources and other high-value assets, such as the vast potash reserves in the Danakil region, Eritrea’s economic recovery can be quick and broad-based.

For that to happen, however, robust policies and highly functional institutions must fill the void the regime will leave behind. Building key infrastructures and technologies to reverse this decades-long decay must be part of the economic recovery plan. Rwanda was in a similarly hopeless situation in the 1990s. It is still a work in progress and some of its dictatorial tendencies are worrisome, but Rwanda’s journey from those ashes towards a more reconciled future is impressive and worthy of imitation. With similar focus and commitment, Eritrea’s future can also be changed for the better. That is, if its deeply traumatized population quickly and completely discards the regime’s toxic culture of war and poverty that Eritrea is known for today.

9.1 Sustainable and Renewable Energy

Electricity is the key infrastructure that almost everything else depends on. Without abundant, reliable and affordable electricity, no meaningful development is possible. Airports and Seaports are the two important infrastructure examples that requires efficient electric power systems. The Internet which is the heart of knowledge cannot exist without electricity. Hence, nations like Eritrea desperately need to narrow the ever-widening development gap; and the same is true with any type of energy-intensive industry Eritrea may wish to invest in.

Eritrea has a good potential to generate ample electricity from renewable sources. Preliminary studies indicate abundant wind energy exists in the Assab corridor and in some highland areas. Solar-based electricity is possible just about anywhere in the mainland or the over 300 islands in the Red Sea. It requires more study but thermal energy and gravity-assisted hydropower in the Danakil depression is also a viable addition to add to the mix. Combined, these resources can enable Eritrea to be fully self-sufficient in green energy. If designed well, the sector can easily scale up to accommodate various export-oriented high-income ventures.

As an example, Namibia is beginning to explore a lucrative hydrogen production industry which an industry Eritrea can compete in effectively. With well-thought-out long-term policies and collaboration with tested

partners to implement them, Eritrea's energy sector can fuel diverse and profitable industries that will benefit Eritrea and the region for the foreseeable future.

The importance of developing the energy sector cannot be overstated, as illustrated clearly by the night map of the world (Fig 1 below).

Today, Eritrea's annual per capita electricity consumption is about 200Kwh vs Norway's 23,000Kwh, for example. Development and economic growth are directly correlated to the availability of abundant and reliable electricity to run homes, industries, financial systems and information systems. Australia's night map could be misinterpreted at first glance. But despite its large geographic area, its 26 million citizens are concentrated in the coastal areas, as illustrated by this night map. It also shows Egypt's, and to some extent Sudan's, heavy population centers along the banks of the Nile. In stark contrast to this reality, Eritrea's total electricity generation capacity is limited to the miniscule 88MW Hirgigo plant and the 15MW old Beleza plant. Both are poorly run, with regular blackouts that sometimes go on for weeks. With expanding desertification, 80% of Eritrea's energy needs come from biofuel today, making it the least prepared nation to deal with the unfolding crisis of the global climate change.



Fig 1

The benefits that abundant and clean energy are endless. Given Eritrea's desert-like climate, desalination is another example of how Eritrea's severe clean water challenges can be mitigated.

9.2 Marine Resources and Food Security

Rain-fed agriculture has been the primary method of food production for centuries. But the rains are either failing or becoming too sporadic to rely on for long-term food security. The regime's over-militarized culture has also depleted Eritrean villages of their youthful energy, further diminishing agricultural output.

Additionally, except for the Afar region, sea food is not a staple of the Eritrean diet. Yet, Eritrea has 1000 Km of shoreline with all sorts of untapped marine life and other resources that can readily address this problem.

As a result, introduction of seafood culture is one of the top priorities future policymakers must consider to mitigate Eritrea's existing and pending food-security gaps. But to do this, Eritrea's poor transportation infrastructure needs a major upgrade.

9.3 Transportation and Communication Sectors

Currently, transporting seafood to population centers in the rest of the country is very inefficient. Volume is low and spoilage is high, making it unprofitable and unsustainable. The single-lane, 60-mile windy Asmara-Massawa Road can take 2-3 hours – much longer if accidents block the road. The trains that carried goods as far as Keren and Agordat in the 1940s and 50s no longer exist. There was even a functioning ropeway (*teleferica*) from Massawa to Asmara that the British dismantled and sold for parts in the 1940s. Eritrea's two ports, Assab and Massawa, are dilapidated and hardly generate any revenue that trickles down to the population.

All these need to be restored just to get to where Eritrea was in the first half of the last century. Of course, doing only that will clearly not be enough because more is needed to run efficient and competitive economies today.

Therefore, Eritrea's future policy planners need to rebuild and enhance this critical network of roads, railroads, ropeways, airports and port facilities so people and goods can get from anywhere to anywhere in a reasonable amount of time modernity demands and expects.

Similarly, Eritrea's communication sector is in no better shape. Mobile phone penetration (7%) and Internet connectivity (2%) are among the lowest in the world. With such low numbers, Eritreans are excluded from simple things taken for granted in other countries. While Kenyans use MPESA to make and receive payments using their mobile phones, Eritreans lack very basic banking services. There are no ATMs or mobile payment systems. Even the branches of the same bank cannot communicate with each other, forcing customers to a single branch to conduct their banking needs.

Fiber-optics lines carrying massive Internet traffic cross the Red Sea bypassing Eritrea. Future policymakers can connect Eritrea to this hub of modernity, completely changing the trajectory of its future for the better.

10. Equitable and Effective Administration Zones for Sustainable Economic and Social Development

To maximize equity in economic and social development across all segments of Eritrea's population, Eritrea could do well to restructure itself into novel administrative zones where all national resources, including the long coastline and its hundreds of islands, are distributed as equitably as possible. As stated in the introduction section the Eritrean population ranges from 3.5 to 5.5 million and with such a small population, two administrative areas fairly sharing the Red Sea and its islands, with Asmara as a third entity is probably sufficient, as further fragmentation is likely to be inefficient in all aspects of nation building.

It may not seem obvious at first glance but creating economically vibrant administrative regions where national resources are distributed fairly can be a very effective way to provide equal opportunity to the broader population. Efficiently structured administrative regions can be a good foundation for sustainable economic growth and a much healthier political environment. A future representative government will obviously have the final say regarding the pros and cons of such an approach, but it is a critical economic empowerment option that needs serious contemplation.

To ensure no one is left behind, the new administrative zones must have equal or near equal access to all Eritrea's marine and other resources. Equitable opportunity of these resources can generate the greatest good for the large number of people; making the long term economic and social health of the country possible. Future policymakers, therefore, need to continuously assess and re-balance Eritrea's national resources to encourage and nurture fair representation and peaceful co-existence between Eritrea's diverse populations. Well thought out semi-autonomous and economically vibrant administrative zones where everyone feels represented and has equal opportunity to access all national resources can be a key foundation for a solid and irreversible economic and social development.

11. Conclusion

There is no segment of Eritrean life, institution or infrastructure the PFDJ regime has not destroyed. The constitution was not implemented as the result a democracy and rule of law are non-existent; it sabotaged the sound economic policies that promote private ownership and investment in all sectors of the economy; it destroyed the dreams of Eritrean youth to be the future leaders, scientists, professionals, artists who were committed to develop their country and grow with it; it destroyed the family and social fabric of the society; and it caused the loss of the lives of tens of thousands of Eritreans through the disastrous wars it instigated with all its neighbors. Therefore, it is a matter of extreme urgency that the regime exits the scene sooner than later

before the destruction becomes total. Endless death and destruction the despotic regime causes every day, complemented with our continued passivity and unreasonable tolerance for the intolerable over the last 31 years can make things seem hopeless. But as hopeless as things are now, Rwanda also provides a glimpse of hope that Eritrea, too, can rise from the ashes. With the PFDJ regime gone, future policymakers should avoid economic models that set the bar low by adopting typical third-world examples. Instead, it lean heavily towards a holistic and more systemic approach where Eritrea strives to model itself after successful developed nations for a more dynamic and sustainable future.

12. References:

- Rena, Ravinder (2007) "Historical Development of Money and Banking in Eritrea from the Axumite Kingdom to the Present", New York: USA: African and Asian Studies, Vol.6 No. 1&2(June).pp.135-153.
- Wade, Robert H (2015): The Role of Industrial Policy in Developing Countries, Vol 1, pp. 67-90.
- World Bank, 2020 Annual Report. Retrieved from <https://www.worldbank.org>
- African Development Bank (2020 & 2021). Eritrea Economic Outlook. Retrieved from <https://www.afdb.org>
- Deice, P.U.C. (2020). Tourism in Africa: Issues and prospects of sustainable human resource management in tourism, 9-27.
- Jenkins, C.L. (2015): Tourism policy and planning for developing countries. Retrieved from <https://www.researchgate.net>
- Nevsun, CRS Report (2014). Retrieved from <https://tesfanews.net/tag/csr-2014-report/>
- Sharpley, R., & Telfer, D.J. (2015). Tourism and development in the developing world. Retrieved from <https://www.routledge.com>
- The African nation aiming to be a hydrogen superpower (2021), Retrieved from <https://www.bbc.com/news/business-59722297>
- UNWTO (2015). Annual Report on global tourism (2015). Retrieved from <https://www.unwto.org>
- US Chamber of Commerce Foundation: Educating the public on how businesses do well, do Good and prepare for future. Retrieved from <https://www.chamberfoundation.org>
- World Bank. Eritrea overview: Development news, research, data. Retrieved from <https://www.worldbank.org>
- The Government of State of Eritrea (1994). Macro-Policy. Retrieved from <https://www.eridigest.com>
- World Bank. Small and Medium Enterprises (SMEs) Finance. Retrieved from <https://www.worldbank.org>
- WTTC (2019). Economic impact report: World Trade and Tourism Council. Retrieved from <https://www.wttc.org>
- Draft Report, Ministry of Energy and Mines. December 2018
- UNDP (2019), Human development summary capturing achievements in the HDI and complementary metrics that estimate gender gaps, inequality, planetary pressures and poverty. Retrieved from <http://hdr.undp.org>
- Rena, Ravinder (2007) "Historical Development of Money and Banking in Eritrea from the Axumite Kingdom to the Present", New York: USA: African and Asian Studies, Vol.6 No. 1&2(June).pp.135-153.
- LLOYDS Bank (2022), Foreign Trade in Figures, Retrieved from <https://www.lloydsbanktrade.com/>
- African Union (2022), The African Continental Free Trade Area Launched, Retrieved from <https://au.int/en/>