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TITLE:
**INCLUSIVE INNOVATION TO ADDRESS POVERTY,
UNEMPLOYMENT AND INEQUALITY IN SOUTHERN AFRICA**

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Abstract

Policy makers are confronted with the challenge to boost economic growth while making it socially inclusive. We understand that the number of people living in extreme poverty around the world continues to decline but the proportion of people living in extreme poverty in the developing economies countries remains at unacceptable levels with over 40 to 50% of the population still live below the international poverty line. The aim of this paper is to appeal to the sense of duty FORUM participants should have towards INCLUSIVE INNOVATION to address poverty, unemployment and inequality in Southern Africa. Our duty is to see how inclusive innovation towards new goods and services are developed for and/or by those who have been excluded from the development mainstream particularly the millions living on lowest incomes. This paper will show how inclusive innovation is the most profound source of international transformation and competition since the industrial revolution began to turn external trade and labour markets into a routine feature of human life. Inclusive innovation will only be successful if it reaches a much larger segment of the poor and excluded population in the region than it currently does.

Keywords: Inclusive innovation, poverty, unemployment, inequality, Industrialization, labour market, population, knowledge system, policies.

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Contents	
Abstract	ii
Abbreviations	iii
1. Introduction	1
2. Industrialization	2
2.1 Policy Options	3
3. Understanding Inclusive Innovation	4
3.1 Policy Options	6
4. Population Growth and Economic Development	7
4.1 Thomas Malthus Argument of Population	9
4.2 Inclusive Innovation in the Region and Malthusian Trap	10
4.3 Relations between Labour Market, Economy and Inclusive Innovation	11
4.4 Strategic and Policy Options	13
5. Policies in Support of Inclusive Innovations	14
5.1 Policies to Support Employment Creation	14
5.2 Policies to End Poverty and Inequality	15
6. Inclusive Innovation-Poverty, Unemployment, and Inequality: OUR DUTY	16
7. Conclusion	17
Acknowledgement	18
References	18
Appendix1: Graphical Representation of the Gini Coefficient	19

Tables

Table 1: Specific Characteristics of Poverty towards Inclusive Innovation	4
Table 2: Pro-Inclusive and Grassroots Innovations and Standard Innovators	6
Table 3: Characteristics of Inclusive Innovation	8
Table 4: Population, Unemployment, GDP and Gini-Index	12
Table 5: Consumer Price Inflation in Southern Africa, 2015–19 in Percentage	12
Table 6: Some of the Policies in Support of Inclusive Innovations	15

Abbreviations

ADG	African Development Group
CIA	Central Intelligence Agency of United States
GDP	Gross Domestic Product
HDI	Human Development Index
ICT	Information and Communication Technologies
ILO	International Labour Organization
IS	Innovation System
MDGs	Millennium Development Goals
SACU	Southern African Customs Union
SDGs	Sustainable Development Goals
SMEs	Small to Medium Enterprises

SMIs	Small and Medium sized Industries
PGI	Poverty, Growth and Inequality
PPP	Purchasing Power Parity
UN	United Nations
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
US\$	United States Dollar
WB	World Bank

1. Introduction

Southern Africa is the southernmost region of the African continent, variably defined by geography or geopolitics, and including several countries. The term southern Africa or Southern Africa, generally include Angola, Botswana, Eswatini¹, Lesotho, Malawi, Mozambique, South Africa, Zambia and Zimbabwe, though Angola may be included in Central Africa and Malawi, Mozambique, Zambia and Zimbabwe in East Africa. In the United Nations (UN) scheme of geographic regions, five states constitute Southern Africa namely: Botswana, Eswatini, Lesotho, Namibia and South Africa. From a political perspective the region is said to be **UNIPOLAR** with South Africa as a first regional power and continues to experience the problems associated with capitalism². It is widely accepted that the unequal distribution of the national pie tend to induce conflict, as some groups or classes see others moving ahead rapidly while they themselves gain little or in some instances even slip backwards.

The truth remains that these countries are characterized by unacceptable high levels of poverty, unemployment and inequality. Societies marked by relative equality respond somewhat differently to changes in the level of economic activity. Therefore, development must lead to a better life for the majority and eradicate poverty unemployment and inequality. The eradication of poverty is the ultimate objective of all development agendas. Policy makers should know that future of work must not leave anyone behind as poverty cannot be eradicated without addressing the pervasive inequalities in incomes and economic opportunities between and within population, countries and regions. Current trends world-wide and in particular Africa show that the economy is growing slow, the region is making scant progress on ending poverty, creating decent employment, reducing inequality, increasing social protection coverage and closing gender gaps. Employment and wage growths are also falling behind economic growth. Experience suggests that the proportion of people living in extreme poverty remains at unacceptable levels. Action is urgently required by policy makers and experts to decrease poverty, unemployment and inequality.

Some economists argue that accelerating progress towards inclusive innovation is a key element of national strategies to promote human development, political stability and inclusive growth. For example gender inequalities in employment participation are in part the result of household inequalities which are inextricably linked with the unequal division of paid and unpaid labour involving care work. Now, however, new technologies and inclusive innovation present potential for young people employment and economic opportunities between and within young people. Today, industry is a key contributor to employment globally. Inclusive innovation means someone is being included. Returning to our concern with inclusive innovation, if you work on technology, you need to understand innovation. If you work on technology and development, you need to understand inclusive innovation.

In simple terms, inclusive innovation is the means by which new goods and services are developed for and/or by those who have been excluded from the development mainstream; particularly the billions living on lowest incomes³. Experience in the region has now shown that industrial and territorial inclusiveness will depend on policies, which affect innovation itself, the diffusion of innovation and framework conditions.

¹ **Note:** Eswatini former Swaziland.

² **Note:** Capitalism strives to expand the market and constantly find new raw materials in the developing economies countries to improve and increase the supply to create profits for capitalist. Expansion always has led to exploration into other parts of the world and in particular Africa, Asia and Latin America to retrieve cheap labour or free raw material and other resources. We have a duty to understand that when labour is free or cheap and raw materials are sold by a capitalist, the supply chain is corrupted for the benefits of the elites. It is hard to find responsible supply chains that protect workers including environment and this is the major tendency and flow of capitalist system. We have a duty to understand that capitalism has produced enough food to feeds the world, yet people do not have access to this food because of the lack of resources. The system will never meet the needs of the majority of the world population as result: Poverty, unemployment and inequality are becoming a syndrome.

³ Mlosy C.D (2017). Africa Unity for Renaissance International Conference, Pretoria, South Africa.

Nevertheless, the paper will argue that, up to now, the way that inclusive innovation has been managed and in particular in the region has eroded the ability of the state to play its proper role. At the root of this problem is the regional political system-if such it can be called. Actors, including policy makers, international organizations, national non-profit and advocacy groups, private firms and governments regulatory bodies, can change the innovation system by challenging the rules and norms that govern the behavior of other actors. The decision of policy makers and regional leaders must reflect basic democratic principles not economic might. Everyone needs to be protected throughout the life cycle in order to meet the basic needs through basic needs strategy.

In summary, the paper address critical areas of poverty, unemployment and inequality which require inclusive innovation be developed into concrete goods or services; that these can be accessed and afforded by the excluded group; and that the group also has the motivation and capabilities to absorb the innovation. Policy makers, experts and leaders need to understand that the success or failure in a particular stage of the innovation system is shaped by other innovation stages.

The paper suggests and appeals to FORUM participants to emphasise as their key word "DUTY". In other words, we have a duty, an absolute duty to learn to live and work in the twenty-first century to minimise unnecessary suffering and death in the course of "Our Modern Democratic System". Policy makers, experts and leaders are confronted with the challenge to boost economic growth while making it socially inclusive. The paper is not exhaustive, but rather intended to lead to further discussions at this FORUM. After providing some background information the paper starts discussion on industrialization.

2. Industrialization

Industrializations based on capitalism principles. Capitalism has created a skewed distribution of resources as few people own and control a large part of world wealth and resources. If capitalist endeavored in social entrepreneurship and more responsible production methods and business practice, it would be a greater advantage to the region. Industrialization is defined as the large-scale introduction of manufacturing into a society. It shifts an underdeveloped agricultural economy focused on human labour to an industrial economy based on machine labour. It's a process whereby individual labour is replaced by mechanized mass production and specialized labours, which boosts productivity⁴. Industrialisation is the period of social and economic change that transforms a human group from an agrarian society into an industrial society, involving the extensive re-organisation of an economy for the purpose of manufacturing. As industrial workers' incomes rise, markets for consumer goods and services of all kinds tend to expand and provide a further stimulus to industrial investment and economic growth⁵.

Some argue that attempts at dealing with industrialization challenges in the region have given rise to some extraordinary leadership, both good and bad, both complex and contradictory in its policies. In sum, the value of leadership cannot be overemphasized, however, and is a key to engagement by regional's people and external community in addressing industrialization challenges. Industrial development creates the conditions to tackle poverty, unemployment and inequality in both developed and developing economies countries, through the provision of greater productivity, stable employment, increased incomes and opportunities for social mobility. However, the benefits of this prosperity must be shared more equally within societies, and must reach often vulnerable demographic, such as young people, women, migrants and minorities⁶. As FORUM participants we have a duty absolute duty to know that the love of money is a root of all sorts of evil including corruption leading to poverty, unemployment and inequality within the population in the region.

⁴ See: Business Dictionary. The Industrial Revolution began in the 18th century, when agricultural societies became more industrialized and urban. The transcontinental railroad, the cotton gin, electricity and other inventions permanently changed society.

⁵ Mlosy CD, (2013). Economics of Privatization and Labour Market in Africa. "The Thinkers" For Through Leaders Magazine. March 2013/ Volume 49.

⁶ 2030 SDGs, (2015). Achieving the Industry - Related Goals and Targets. UNIDO, Vienna.

Experience suggests that the disparity in population is vast as that in land area and if we follow the definition provided by the Sprouts, technology is the application of human skills or techniques to accomplish human purpose⁷. Creative genius has continually led people to develop new industries to overcome space and time, to generate power for economic and sustainable development purpose, to communicate and transport ideas and objects. Obstacles such as mountains, desert or distance are overcome by inventions such as the automobile, the railroads, or the airplane etc. As an alternative or supplement, industrialization can also overcome the obstacles and limitations imposed on governments by the natural resources available to them. For these reasons, industrialization as a strategy of integration in the market has its drawbacks as well as its attraction. New industries and technologies permit the extraction of resources and many other minerals previous out of reach. In sum, the industry that exists in the system at any time is an important constraint on what is possible. The truth remains that science and technological innovation is essential for human development, wealth creation and the improvement of quality of life. There is a need to boost the regional's prospects of developing viable industrial clusters, regional value chains for small to medium enterprises (SMEs) as well as establishing middle and high-capacities enterprises which will strengthen the regional's capacity to integrate into the global production and trading system. Nevertheless, to argue, and the determination of economic growth, inclusive and sustainable industrial development is associated with job creation, sustainable livelihoods, innovation, technology and skills development, food security and equitable growth⁸.

Experience suggests that industrialization has historically been a significant driver of modernization. The system of production has arisen from the steady development, study, and use of scientific knowledge. It is based on the division of labour and on specialization and uses modern technologies in production. We know that, economic transformation and industrialization are largely based on the accumulation of human and technological capital. This requires building capabilities and learning, which in turn leads to higher earnings for a wide spectrum of the population in increasingly economies. Some economists argue that regional's overall economic declines are linked with its economic structure and its trade patterns. The region has not significantly industrialized to international standard; it has not reached its initial dependence upon primary commodities for exports. This is in contrast to the rest of the developing economies countries. The blame for this should not, of course, lie solely at the door of policy makers or leaders, but was tolerated and occasionally implicitly encouraged by external powers and agencies. The region has, as a result, become the development challenge. We must acknowledge the contradiction to economic and political liberty, especially between trading partner countries.

2.1 Policy Options

The future is uncertain. Experience suggests that technology and innovation creators in the market sector respond to the demands of high-income consumers rather than the needs of those especially in rural areas who have little purchasing power. Public sector funding and incentives for research and development can compensate for market failures. But most governments in both developed and developing economies countries have failed to provide the support needed. Industrialization can make an important development impact because they can overcome barriers of social, economic and geographical isolation, increase information and education and enable poor people to participate in more of the decisions that affect their lives⁹.

In summary, industrialization is a critical source of growth, economic diversification and value addition. Industrialization will continue attracting attention; being seen as a sector which when present has reliably improved economic diversification, helping countries to nurture, strengthen and uphold the conditions for competitive growth and development. We all agree that sustainable industrial policy remains important for the promotion of industrial development in the region.

⁷ Harold & Margaret Sprout, (1971). *Towards a Political of the Planet Earth*. New York: Van Nostrand Reinhold.

⁸ 2030 SDG United Nations 2016.

⁹ 2002. *The Economist Technology Quarterly March*.

However, the context for the design of industrial policy has profoundly changed as a result of new rules governing international trade, the rise of global value chains and marketing networks, and other aspects of the so called globalization. Industrialization has been a campaign promise across the region, with its acknowledged ability to bring prosperity, new jobs and better incomes for all. Yet the region is less industrialized today than it was four decades ago.

High commodity prices triggered by developed economies countries appetite for natural resources have contributed to poor industrialization in the region. Good number of policy makers and experts thought the boom would revive regional’s waning manufacturing industry. Yet to the dismay of analysts, it failed to live up to expectations. Some experts agreed that one of the main reasons for the regional’s slow industrialization is that its leaders have failed to pursue bold economic policies out of fear of antagonizing developed economies countries (donors) including China. The tendency of regional governments to assign a leading role to the state in creating and operating industries simply made the industrialization problem worse. Investments are made with little regards to efficiency, and the managerial capacity of the states is badly overstretched. After discussing industrialization, next is to understand inclusive innovation.

3. Understanding Inclusive Innovation

Defining the target group of inclusive innovations depends on country policy contexts. Sometimes, it is even more complex from a global perspective encompassing developing and advanced economies countries, where the poorest have very different income levels. An innovation that is accessible to the poorest in advanced economies may only be accessible to the emerging middle classes – rather than the poor-in emerging and developing economies countries. Therefore, policy makers and experts face a compendium of complex challenges. Two sets of these relates to understanding inclusive innovation and a failure to address economic crises and conflict in the society. Inclusive innovation, or innovation for inclusive development, no matter how attractive it sounds, entails an implicit form of exclusion. It should therefore make place for a fairer approach that empowers the excluded population to share in the mainstream development instead of devising a specific development path with adapted goods and services for them. Table 1 provides specific characteristics of poverty shape towards regional priorities with regard to inclusive innovation.

Table 1: Specific Characteristics of Poverty towards Inclusive Innovation

Type	Interpretation and Technical Characteristics
The Population Distribution Across Income Groups in the Region	It is widely accepted that “Inclusive innovation” will only be successful if it reaches a much larger segment of the poor and excluded population than it currently does. Where extreme poverty is widespread and markets are poorly developed, market-based inclusive innovations mechanisms face larger obstacles. The size of adjacent higher-income groups can help develop opportunities for cross-financing models, whereby the poorest pay a very low price, which is compensated by the higher price paid by the moderately poor of marginally higher income.
The overall Regional Market Size	Structural transformation towards inclusive and sustainable industrial development and foster innovation will serve as an engine to create decent employment opportunities, end poverty and reduce inequality between and within population. Especially, if accompanied by substantial economic growth, a relatively larger market can also provide incentives for foreign multinational corporations in particular to supply it with innovations for the benefit of the poor.
Poverty’s Impact on Rural Populations	Agriculture is the primary industry in most rural areas . In today’s world, we like to define people by how many possessions they have—by the car they drive, the square footage of their home, or the number of assets they have accumulated. We have a term for that: Net worth . The truth is that the income level of a large segment of the population in the region is low, hindering citizens from taking advantage of innovation and new technologies. Increased capital flows and improved technology appear to offer countries in the region the opportunity to

	leapfrog ahead in its development. The scale of the regional's challenges demands policies based on engagement and not on isolation. More generally, poverty's geographic distribution determines certain needs in the rural areas. It influences the number of different markets – often limited in size and with specific local demands, posing potential challenges for delivering certain types of inclusive innovations. An innovation's scale also depends on market segmentation or consumer location.
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Source: Authors compiled from different sources.

Experience suggests that the discourse about inclusive development inevitably touches on the notion of pro-poor innovation as one of the most representative sources of inclusive development. In fact the rationale behind innovation for inclusive development is that in spite of impressive technological advances in the global economy, an important share of the regional's population remains excluded from many of the innovations that improve the quality of life. With economic stagnation or decline, and worsening state services in the region, the social contract breaks down, and violence results. High and rising levels of poverty and a decline in state services is the main cause of social conflict in the region.

We have witnesses that poverty, high unemployment and growing inequality fuel social unrest around the region. Policies aimed at creating good-quality jobs are crucial to reduce the risk of exclusion and promote a sense of fairness. In the twenty-first century, inclusive innovation will only be successful if it reaches a much larger segment of the poor and excluded population than it currently does with initiatives such as building around financial sustainable business models and participation by lower-income and excluded groups. The truth remains that the relationship between poverty and education is particularly important because of the key role played by education in raising economic growth and reducing poverty. Inclusive innovations in education can be particularly valuable, as they allow children and adults from socio-economically disadvantaged backgrounds to gain the knowledge and skills necessary to participate fully in the economy. According to this argument, the success of better educated person has higher incomes and thus is much less likely to be poor¹⁰.

Although some people may think they have easy answer to the regional's dilemmas, the body of tested theory to support reliable policy recommendations is very small. The lives of millions of people their hopes for relief from the physical misery of poverty and for the implementation of political liberties are at stake. A responsible analyst, therefore, must tread a treacherous line between irresponsibly ignoring the desperate problems of these people and irresponsible offering ill-conceived solutions that others will have no live with. In controlling the follow of goods, there are a number of techniques that use to control the follow of goods, services, and resources between governments. These controls can be used either to punish or reward-either to cut down or expand the amount of the goods being traded or to make that good more or less expensive. Innovation is the process and product of collaborative solution-development. Innovation does not just generate profits-it can also make region a better place by addressing some most pressing development and humanitarian challenges such as organized corruption.

However, we understand that innovation process is complex and often excludes key stakeholders, intentionally or unintentionally, in how it is practiced. Access to new technologies can play an important role in human development and economic growth in the region. Most important are the links between inclusive innovation and sustainable industrial development. Many different actors, including micro, small and medium enterprises, large domestic corporations, multinational enterprises, state enterprises and not-for-profit corporations, have introduced pro-inclusive

¹⁰ **Note:** On 16 December 2017, former president of South Africa from **nowhere** announced that government would be phasing in fully subsidized free higher education and training for poor and working class South Africans over a five-year period. This statement left many South Africans hopeful and eager to see an important change in education system. The country is still fighting against the historical poverty, unemployment and inequalities. Similar to the apartheid state, education for Africans is far from ideal. Countries in the region need to be willing to do things differently in the twenty-first century.

innovations in papers. Business model innovations in particular are critical to inclusive innovations. Industrialization should contribute to government’s revenue and generate profits that are used productively in order to end poverty, generate employment and reduce inequality among the population. Table 2 provides some examples of grassroots innovation, pro-inclusive innovation and standard innovators.

Table 2: Pro-Inclusive and Grassroots Innovations and Standard Innovators

Type of Innovation	Interpretation and Technical Explanation
Grassroots Innovations in the Region	These are inclusive innovations emphasising the empowerment of lower-income groups in region. While they are undertaken by the poor, they can be supported by other actors in the innovation system, including universities, non-governmental organisations and private firms. Poor populations can be involved through minor roles (e.g. as product distributors) or more extensive ones (e.g. as joint producers). Grassroots innovation is also closely related to innovation in the informal economy. The concept originally applied to self-employment in small unregistered enterprises. It has been expanded to include wage employment in unprotected employment. According to (ILO 2018), global estimates on the size of informal employment shows 61%of workers are informally employed almost -2 billion workers worldwide.
Pro-inclusive Innovations in the Region	In an increasingly unequal world, the concept of inclusive innovation is gaining traction in academic and policy communities. The pro-inclusive innovations often modify existing technologies, products or services to supply lower and middle-income groups. Among them, frugal innovations allow setting lower unit product prices by preserving only the most critical functionalities, while retaining core quality characteristics. The lower price allows lower-income groups to purchase those innovations. Different studies including UNDP suggest that the poor spend between 60% and 80% of their income on food on average. Among the poorest of the poor, many are net consumers of food. For them, the increase in domestic food price has been significant, and the positive effects on wages lag behind.
Standard Innovators	Standardization can play a significant role in creating and developing emerging technologies and can help ensure more efficient and cost-effective procurement. The standard innovators have easier access to consumer information because: (i) the distance between users and producers is shorter than it is for pro-inclusive innovators; and (ii) Producers have access to more information on consumers drawn from consumption preferences (e.g. through phone surveys, analysis of online consumption behaviour or registered purchasing behaviour).

Source: Authors compiled from different sources.

3.1 Policy Options

Experience suggests that economic and social policies are needed to systematically reduce inequalities. Policies towards employment, education, investment and other social services should aim at reducing imbalances and inequalities. Such policies need to be introduced cautiously since action to correct inequalities has occasionally provoked conflict by the group whose privileged position is being weakened. A major problem is that governments of a conflict-prone country may resist such action, since it may be the beneficiary of the imbalances. Outside agencies can point to the need to reduce inequalities, but ultimately such policies must depend on domestic actors. It is widely accepted that in the longer term, extending education and achieving inclusive development will enhance peacetime opportunities in the region.

Some argue that growing economic, social and technological inequalities and the marginalisation of certain groups in society may amplify recent trends of political and social polarisation within and between countries. Poverty, unemployment, inequality and exclusion continue to be pressing regional social challenges which require comprehensive inclusive human development initiatives in order to achieve equity and well-being in multiple – income and non-income – dimensions. There is a need for policy makers and experts in the region to start listening carefully to the signals coming from evidence on the ground. This is an important step that we need to care and are determined to recognizing regional’s role in the global knowledge economy.

Policy makers and experts need to consider the regional's vast informal economies as explained in table 1 on pro-inclusive innovation. Experience suggests that, it is a crucial basis for creating the necessary opportunities for young people to enter the formal economy and find employment or pursue an entrepreneurship path. It is widely accepted that preparing a generation of skilled entrepreneurs for economic transformation is an essential component of inclusive innovation. It is also accepted that new businesses create new decent employment opportunities, increase the economy's efficiency and productivity and act as a major engine for promoting innovation and changing economic structure.

In summary, entrepreneurship through inclusive innovation is a major building block of industrialization, and one which provides opportunities for valuable groups: young people, women and people with disabilities to grow and thrive, thereby contributing to the prosperity of their communities in the process to end poverty, unemployment and inequality. A combination of improvement in sanitation and health care, along with higher agricultural yields and better technology, have generally translated into improve prosperity and longer life expectancy for regional population. Faster growth, in turn, promotes poverty reduction, higher labour and environmental standards. For policy makers and experts the truth remains that "Inclusive Innovation" projects and programmes are initiatives should directly serve the welfare of lower-income and excluded groups. Experience suggest that inclusive innovations often modify existing technologies, products or services to better meet the needs of excluded groups. Now, let's look on population growth and economic growth.

4. Population Growth and Economic Development

Grinding poverty and striking inequality persist within and among countries even amidst unprecedented wealth. Policy makers and experts need to understand the diseases, old and new, threaten to undo painstaking progress. Today, over one billion people world-wide still live in extreme poverty, the distribution of income is persistently uneven, and the magnitude of income disparities across countries remains large. Poverty remains one of the greatest challenges in the region, with approximately half of the population living on less than US\$1 a day¹¹. Hunger, malnutrition, unemployment, gender, inequality, exploitation, marginalisation, high morbidity, and HIV and AIDS are a few of the complex challenges that contribute to poverty and inequality in the region. According to International Labour Organization (ILO), breaking the cycle of poverty involves full employment and decent work. Evidence shows that decent and productive jobs, sustainable enterprises and economic transformation play a key role in reducing poverty. ILO's contribution was reflected in the work towards the Millennium Development Goals (MDGs).

Now, it is fully embodied in the post-2015 Sustainable Development Goals (SDGs), where social protection floors are mentioned under Goal 1 and Goal 8 explicitly refers to the promotion of inclusive economic growth, employment and decent work, including protecting workers' rights¹². It is widely acknowledged that social protection policies strengthen the resilience against economic, social and climate shocks, support growth and productivity and act as social stabiliser. Over the last decade a paradigm shift took place whereby policies to protect and improve the livelihoods of individuals, families, communities and societies are no longer seen as just a cost for an economy, but instead as a long-term social investment¹³. This stems from the recognition that countries with well-functioning social protection systems (which include efficient and accessible social service delivery) appear to be the most effective in reducing poverty and inequality as well as promoting human development. Innovative delivery platforms of essential commodities "basic needs" can directly benefit those at the

¹¹ World Bank (WB) Reports different years.

¹² The 2030 Agenda for Sustainable Development, approved by world leaders on 25 September 2015 in New York, sets out a universal framework to eradicate extreme poverty and ensure a sustainable future by 2030.

¹³ Mlosy CD, (2017). Africa Unity for Renaissance International Conference South Africa. Poverty, Growth and Inequality (PGI) in Africa: 2030 Sustainable Development Goals (SDGs) Achieving the Industry – Related Goals and Targets – Analysis. Pretoria.

bottom of the pyramid, create employment opportunities, improve public health, education and contribute to the overall development.

It is widely accepted that adequate and secure livelihoods emerge as a central concern to poor people's well-being. In rural areas much hardship is linked to reduced access to land, bad soils, adverse weather and lack of fertilizer, deficiencies of transport and marketing and other inputs. The fact of the matter is that a large majority of population view better livelihood opportunities as distant from them and economic conditions as worsening. The truth remains that demand for innovations is characterized by uncertainty: new products often create new markets, whose prospects are hard to evaluate, and consumers rely on cash flows, which are subject to shocks such as due to lack of work, illness etc. Table 3 provides characteristics of inclusive innovation.

Table 3: Characteristics of Inclusive Innovation

Type	Interpretation and Technical Characteristics
Quality Goods and Services and Livelihood Opportunities	By incorporating low-income populations in the supply, production, distribution and/or marketing of goods and services, companies generate new jobs, income, technical skills and local capacity. Inclusive innovation is not about developing lower-quality products for those who cannot afford quality, but rather about providing better quality to improve their quality of life. This is strongly contingent on innovation, since providing high quality at a low price requires introducing new products, rather than adapting existing ones. Poorer consumers should benefit from products and services that meet their needs in affordable ways.
Significant Outreach	One way to make involvement with outreach activities more efficient is through the effective use of existing resources. True inclusion can only be realized if the benefits of inclusive innovation reach a large scale, i.e. a significant portion of the population stands to benefit from specific inclusive innovations. An effective significant outreach, in addition to addressing an important need, also should identify and target a particular audience. The effective evaluation of outreach activity relies on clearly stated and quantifiable goals (outcomes). The evaluation of a project/programme should not happen only at the end of the project/programme; rather, it also should occur during the project/programme so that midcourse corrections are possible.
Sustainability	Sustainability is the process of maintaining change in a balanced environment, in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations. Affordable long-term access should rely on market mechanisms, without continued government support.
Access to the Excluded Population in the Region	Social exclusion is the process in which population blocked from (or denied full access to) various rights, opportunities and resources that are normally available to members of a different group, and which are fundamental to social integration and observance of human rights within that particular group. Depending on specific national and social contexts, as well as the policy objectives, inclusive innovation should primarily benefit the poor, the disabled, migrants, women, the elderly, certain ethnic groups, etc.
Affordable Access	Experience suggests that the conventional analysis of the access challenge treats the economy as a single entity but the reality is that the economics of the rural poor is very different from comparatively wealthy big cities. Affordability depends on where individuals are positioned along the economic pyramid, the objective being to serve lower-income people through "extreme reduction" in production and distribution costs.

Source: Authors compiled from different sources.

As population growth in the region potentially boosts the supply of low-skilled workers, while automation simultaneously squeezes labour demand, this new generation of workers will advance only if they can acquire marketable skills. In the region there are not enough schools for the poor,

infrastructure is inadequate for the poor, and teacher training is often poor. The focus of investment in education should be primarily on the quality of education, its alignment with the labour market demands, and on on-the-job training. Technologically advanced transportation networks can broaden the benefits of urbanization, create new opportunities, and increase jobs. Migration policies, directed not only at facilitating the participation of foreign workers in domestic labour markets, but also at providing the right incentives to the Diaspora to invest to their homes.

In summary, it is widely accepted that if population growth and per capita GDP growth are completely independent, higher population growth rates would clearly lead to higher economic growth rates in the region. Only the growth in per capita GDP would give rise to improvements in economic well-being. On the other hand, if population growth affects per capita output growth, higher population growth rates would contribute to either higher or lower overall economic growth depending on the nature of its effects on per capita GDP¹⁴.

Therefore, growing economies need growing populations¹⁵, increasing the supply of both workers and consumers, although the precise nature of this relationship is of course complex and variable. The remarkable success of the developed economies countries in the past 200 years is therefore associated with strong population growth. Yet population growth is problematic if it outpaces increases in productivity and economic growth. On a simplistic level, the relationship between growth in population and growth in per capita income is clear¹⁶. Let's look on Malthus argument on population towards ending poverty, unemployment and reducing inequality within the population.

4.1 Thomas Malthus Argument of Population

The relationship between population growth and economic development has been a recurrent theme in economic analysis since at least 1798 when Thomas Malthus famously argued that population growth would depress living standards in the long run¹⁷. As experience shows that development is a major issue between the rich and the poor and innovation process is complex and often excludes majority of the population **intentionally or unintentionally**. Malthus believed that population has a tendency to grow more rapidly than food supplies so that population reductions through various types of misery are always required to keep the number of people at a level consistent with the amount of food available of course with other basic needs. The implication of Malthus's model is that average incomes will always be driven down by population growth to a level that is just adequate for the population's subsistence.

As the population continued to grow unchecked, the number of people would eventually outstrip the ability of the land to generate enough food. We have duty and absolute duty to understand that the world economic capitalist system is an economic and social power structure and this system breeds and perpetuates poverty, unemployment and inequality today. There would be an inevitable Malthusian trap, a point at which not the region but the world is no longer able to meet the food requirements of the population, and starvation becomes the primary check to population growth. Malthus didn't foresee the technological advances that would raise agricultural productivity

¹⁴ **Note:** For the world as a whole, over the period 1990 to 2015, the correlation between population growth and real per capita GDP growth, based on WORLD BANK (WB) 2017 data, was -0.1849 suggesting that these two variables were uncorrelated during that period.

¹⁵ **Note:** Economic growth is measured by changes in a country's Gross Domestic Product (GDP) which can be decomposed into its population and economic elements by writing it as population times per capita GDP. Expressed as percentage changes, economic growth is equal to population growth plus growth in per capita GDP.

¹⁶ **Note:** Per capita income equals total income divided by population. The growth rate of per capita income roughly equals the difference between the growth rate of income and the growth rate of population.

¹⁷ In 1798, Thomas Robert Malthus published his Essay on the Principle of Population. It proved to be one of the most enduring works of the time. Malthus's fundamental argument was that population growth will inevitably collide with diminishing returns.

and reduce the toll of infectious diseases-advances that have enabled the world's population to grow from 1 billion in 1798 to 7.4 billion today. A competitive agro-industry serves as a platform to create employment, foster innovation and broad-based growth and diversify the product consumption base. We understand that agribusiness and agro-industries have the potential to serve as social and economic empowerment tool for vulnerable groups to produce more food for their needs and for others but the problem is greed the world is facing.

In summary, empirical work on the effects of population growth on economic growth in particular countries has generated contradictory results. Strategic political consideration have often outweighed the need to ensure that the countries in the region have sound policies and institutions that are able to make full use of inclusive innovation thereby ensuring the joint objective of achieving growth and inclusiveness and policy coherence. As pointed out early that, based on the United Nations estimates 2019, the current population of Southern Africa is 66,575,969 this is equivalent to 0.87% of the total world population. We understand that poverty, unemployment, inequality and food insecurity lead to increasing levels of deprivation, vulnerability, hunger and malnutrition which trigger social unrest and constrain development.

The continued ability of the agricultural and food industries to respond to multiple regional challenges, in the form of volatile food price and growing demand for food will be highly dependent on the increased application of existing as well as new and innovative technologies to reduce post-harvest losses and increase resource efficiency, thus contributing to sustainable food security. Private sector expertise and resources should be harnessed and tapped to assist large pool of potentially successful inclusive innovations that have been developed both in rural and urban areas where the majority of people live and work. There are still some policy makers and experts in the region who take exception to conclusions that the region is currently overpopulated with African foreigners coming from other African countries are putting unsustainable strains on resources and employment opportunities.

4.2 Inclusive Innovation in the Region and Malthusian Trap

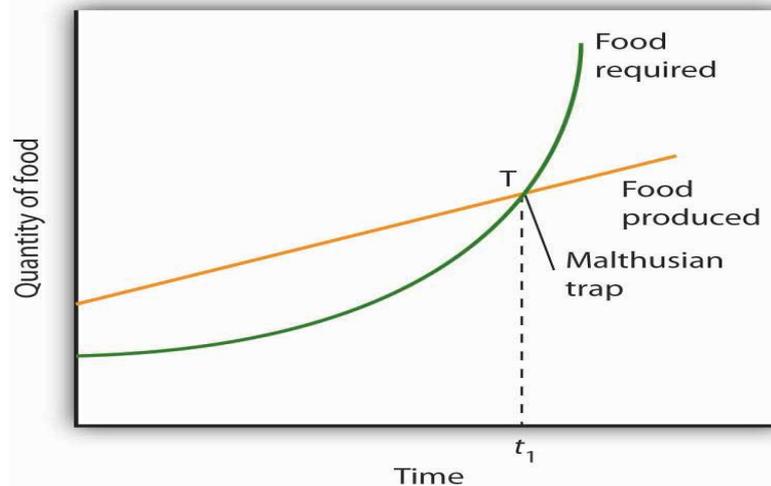
Inclusive innovation is the means by which new goods and services are developed for and/or by those who have been excluded from the development mainstream; particularly the millions living on lowest incomes. A Malthusian simulation model is proposed to describe the growth of human population from the Neolithic through the Industrial Revolution. The slow accumulation of capital and the build up of the population of the capital-producing sector eventually enables the population to overcome the constraints of the hostile economic environment. In counterpoint to Malthus, Robert Solow, one of the most influential heirs to Marshall's intellectual estate, has focused on changing levels of productivity. He believes that capital that takes advantage of new technology is more productive than old capital, and that technological and process innovation is the most powerful driver of productivity. According to Solow, humanity needn't conquer new worlds and acquire their resources to get richer or live better life.

It is generally recognised that two major economic revolutions resulted in substantial increases in the global population of human beings. It is accepted that the bulk of the population in agrarian societies was subject to Malthusian like population dynamics and lived approximately at subsistence level. The new economic system following the Industrial Revolution transformed social structures, and eventually enabled the bulk of populations in many societies to exist at standards of living well above the subsistence level. However, the long term environmental sustainability of economic growth based on the existing economic system has become a subject of increasing concern even though it has enabled a larger global population to exist at a high standard of living than ever before.

It is widely accepted that productivity needs to increase in all sectors of the economy: Primary, secondary and tertiary. Technological innovation and knowledge spillovers have resulted in dramatic advances in standards of living and thus far have offered escape routes from a Malthusian denouement. Believers in innovation often point to the green revolution that took hold in the late 1960s and raised the world's agricultural production beyond even the most optimistic prior estimates. The most obvious requirement for radical, technologically disruptive innovation is access to risk capital

for relatively unspecified investment in the region. Taking into account that poverty, unemployment, inequalities continue to be pressing social challenges today.

Figure 1: Malthusian Trap



In summary, experience suggests that if economic development can slow population growth, it can also increase it. One of the first gains the region can achieve is improvements in such basics as the provision of education, clean drinking water and improved sanitation. Such gains can dramatically reduce disease and death rates. As desirable as such gains they also boost the rate of population growth. Nations are likely to enjoy sharp reductions in death rates before they achieve gains in per capita income. As population rate grow successful innovators should invest in gaining a deep understanding of the requirements of the poor, which can be achieved by involving them directly in innovation processes as majority of the population live and work for survival. The employment-population ratio has not always been looked at for inclusive innovation.

4.3 Relations between Labour Market, Economy and Inclusive Innovation

The labour market, also known as the job market, refers to the supply and demand for labour in which employees provide the supply and employers the demand. It is a major component of any economy and is intricately tied in with markets for capital, goods and services. At the macro-economic level, supply and demand are influenced by domestic and international market dynamics, as well as factors such as immigration, the age of the population and education levels. Relevant measures include unemployment, productivity, participation rate, total income and gross domestic product (GDP). At the micro-economic level, individual firms interact with employees, hiring them, firing them and raising or cutting wages and hours. The relationship between supply and demand influences the hours the employee works and compensation she/he receives in wages, salary and benefits. Labour productivity is another important gauge of the labour market and broader economic health, measuring the output produced per hour of labour.

Poverty, unemployment and inequalities within the population in the region, as well as enormous inequalities elsewhere in the economy lead to increasing government's intervention in the economy. Insofar as the governments are directly dominated by either foreign or domestic investors, it will reflect their interests in stabilizing costs by keeping wages down and thereby maximizing profits. Labour markets play a central role in determining economic and social progress since employment status is one of the key determinants of exiting poverty and promoting inclusion. Experience also suggests that most countries in the region are that the labour market fails to create the jobs in the formal economy that would help individuals and their families prosper. In recognition of these challenges, governments and other stakeholders in the region have increasingly prioritized policies and programme to promote productive employment and decent work in an attempt to end poverty and reduce inequality but with less positive success. Therefore, we have a duty to understand that

inclusive innovation presents both risks and opportunities in the region. In other words, we have a duty, an absolute duty to learn to live and work in the twenty-first century to minimise unnecessary suffering between and within population.

The relationship between new technologies, innovation, employment and inequality has gained a lot of attention in recent years. One reason for this interest is alarming social conflicts with negative consequences for employment from the widespread use of new technologies such as information and communication technologies (ICTs), including machine learning, digitalization of production, robotics and automated vehicles. The challenge of the future – besides increasing innovation to spur employment growth – lies in coping with rising inequality as a result of technological change. Experience suggests that skill-biased and routine-biased technological changes are two mechanisms that may increase inequality, because they favour particular groups of the workforce and reduce the employability of other groups, in particular low skilled workers who already bear a considerable share of the adjustment costs of innovation. The risk of displacement of their jobs is higher, and the number of available jobs that require only low qualification decreases.

The International Labour Organization (ILO) pointed out that a key problem is that despite high unemployment rates, there is very limited social protection for unemployed working-age adults in the region. For example, the contributory unemployment insurance system covers only 45% of the labour force, excluding those who have been unable to make contributions¹⁸. Table 4 shows southern Africa countries population, unemployment, GDP and Gini-Index while table 5 shows consumer price inflation, 2015–19 in Percentage.

Table 4: Population, Unemployment, GDP and Gini-Index

Country	Population 2019*	Unemployment Rate % 2019***	Nominal GDP (US\$ Billions)**	Nominal GDP per Capita US\$**	Gini Index ****
Botswana	2,374,636	18.1	17.168	7,876.997	61
Eswatini	1,415,414	26.4	4.491	3,914.821	52
Lesotho	2,292,682	27.2	2.768	1,425.310	54
Namibia	2,641,996	27.9	12.687	5,413.508	61
South Africa	58,065,097	27.4	349.299	6,179.870	63

Source: * <http://www.worldometers.info/world-population/southern-africa-population/>

** [https://en.wikipedia.org/wiki/List_of_African_countries_by_GDP_\(nominal\)](https://en.wikipedia.org/wiki/List_of_African_countries_by_GDP_(nominal))

***Figures for 2019 are projections by the author for the whole year.

**** Gini Index figures are projection by author from the World Bank figures of 2012. **Note:** Thus a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.

Table 5: Consumer Price Inflation in Southern Africa, 2015–19 in Percentage

Country	2015	2016	2017	2018	2019
Botswana	3.1	2.8	3.4	3.6	3.8
Eswatini	5.0	8.0	7.0	5.0	5.1
Lesotho	4.3	6.4	5.3	6.0	6.8
Namibia	3.4	6.7	6.5	6.0	5.7
South Africa	4.6	6.3	5.4	5.2	5.4

Source: African Development Group (ADG): Southern Africa Economic Outlook 2018. **Note:** Figures for 2017 are estimates while figures for 2018 and 2019 are projections.

In summary, regional integration is a necessity for sustainable development and the generation of dynamic growth amongst Southern Africa countries. Modern theories of international trade attempt to explain the link between wages and immigration. Different kinds of skills are required where there are different dominant patterns of capital-intensive or labour-intensive production. Skills levels therefore have a key effect on the labour market in region. In recent years, there has been a fairly steady flow of migrants primarily from low-and moderate-income countries to high-income countries.

¹⁸ 2015. ILO's World Employment and Social Outlook Report. Geneva.

There is some migration among the low-and moderate-income countries but the main flows are to Europe and North America as well as such regional magnets as South Africa. According to United Nations 2017 data¹⁹, 3.3% of the world population lives in countries that are not the countries in which they were born. Under a narrow definition it means that the demand for and supply of labour becomes more international. Or in other words, an employer, instead of having to rely on a national worker, now reaches over borders for a foreign worker, and a worker instead of only being able to look for employment on the national labour market, can go abroad. Therefore, we have a duty to understand that inclusive innovation presents both risks and opportunities in the region.

4.4 Strategic and Policy Options

What all these countries' experiences is that, the possible negative consequences of new technologies for employment have inspired a number of suggestions for policy intervention in recent years. New technologies and innovations are expected to change not only the volume of work and the demand for different skill levels, but also the organisation of work. The fact of the matter is that, individual tasks performed by people will increasingly become tradable over the internet/ machines. Experts believe that the share of tasks performed outside the firm and the share of self-employed people who work on a project-by-project basis for various clients will increase. As a consequence, firms will gradually shift to more project oriented organisational structures instead of fixed hierarchies. Such a platform or gig economy may lead to more self-determination and a better work-life-balance for employees, but may also result in more insecurity and periods of involuntary unemployment. Moreover, self-employed platform workers often lack legal protection and the various social benefits to which employees are entitled.

Some argue that, in a world where skill levels are closely related to inequality, it seems essential to invest in education; these investments should encompass all levels of the education system. New results point to the importance of the early years for later learning, which could be a particular focus for policy intervention in the region. The promotion of research and development (R&D) should be another focus of public policy in the region. Potential returns from R&D are higher at the societal level than at the enterprise level, because other organisations can benefit from knowledge created as well. But some of the leading R&D in South Africa such as Council for Scientific and Industrial Research (CSIR) has retrenched almost 168 professional and middle management from the environmental research unit. This will severely affect its capacity to do crucial research in climate change²⁰.

The region should also invest in upgrading its internet infrastructure and promote entrepreneurship to transform new technologies into growth. Policy should review the status of these types of employment and, if necessary, extend social security legislation to platform work. This would also include relying on the owners of platforms for social security contributions. There may be a need for tax systems²¹ to shift from the taxation of labour to a taxation of capital and value added as the main contributor of economic wealth. Machines may also contribute to the financing of social security. Such a shift, however, only seems feasible if the overall tax burden does not increase and the tax burden on labour is substantially reduced. Some experts think that taxing the super-rich may be a way to decrease inequality and raise funds for the governments. If the pessimistic scenario of massive job losses and a huge increase in inequality from the economic effects of new technologies and innovation comes true, this may lead to a massive erosion of the income basis of regional countries. We have a duty, an absolute duty to learn to live and work in the twenty-first century to minimise unnecessary suffering between and within population.

¹⁹ 2017. United Nations: Population Growth and Economic Development.

²⁰ Job Losses Threatens the CSIR's Reputation: March 22-28 2019 Mail and Guardian of South Africa.

²¹ **Note:** For example in South Africa, prior to 2001 the tax system was "source-based", wherein income is taxed in the country where it originates. Since January 2001, the tax system was changed to "residence-based" wherein taxpayers residing in South Africa are taxed on their income irrespective of its source. Non residents are only subject to domestic taxes.

5. Policies in Support of Inclusive Innovations

5.1 Policies to Support Employment Creation

Employment and labour are vital components of economic development. A vibrant labour market attracts foreign direct investment and improves living standards for people throughout the region. Most countries in this region are small with exception of South Africa and are called poor. But, despite low income and productivity, Southern Africa countries play a vital role in the world economy. They supply a variety of raw materials crucial to the economies of the so called industrialized economies countries and provide important markets for manufactured goods from those industrialized nations- the capitalist countries or the so-called free market conservatives²².

The promotion of productive employment is one of the key strategies to eradicate poverty. Employment itself is necessary for an individual's dignity and self-esteem, and an essential element for social recognition and social inclusion. For women, access to paid employment has an even higher value, since it strengthens their bargaining position within the household. Because the specific problems of poverty and employment differ between poverty groups, a differentiated approach is imperative. Poverty reduction calls for the creation of regular and good quality jobs in the labour market. It also calls for the general enhancement of the productivity of the working poor in the self-employment and home-based sectors which means the creation of conditions for improved incomes, working conditions and the protection of vulnerable sectors of the working population.

The relationship between poverty and employment lies in the extent to which income generated from employment permits workers and their dependants to obtain the goods and services necessary to meet basic needs²³ the call for inclusive innovation. Poverty in the region is principally linked to underutilization of labour, whether in the form of open unemployment or massive underemployment²⁴. Poverty can be traced to unemployment especially in both urban and rural areas which, in the last three decades, have expanded to accommodate huge influxes of jobseekers. Most of the urban poor are either unemployed or continually face irregular job access and precarious working conditions. However, the vulnerability of the poor is largely due to underemployment and low returns on labour rather than open unemployment, since the poor would undertake any available economic activity, regardless of pay and working conditions, in order to survive.

In summary, if employment challenges were simple in the region, most of them would be solved. But in fact, the challenges are getting more and more complex in our daily lives. The range of issues is huge. There is a need for governments in the region to have clearly employment policies and a practical plan for achieving employment goals. A national employment policy is not just a job creation programme. It should takes into account a whole range of social and economic issues. It affects many

²² **Note:** Capitalist countries have a tendency to see the world in Black and White: “US GOOD, THEM BAD”. Every day, individuals and businesses around the world make decisions based on self-interest. That self-interest makes sure they have the most amount of money in our pockets and the best chance for profit in the future.

²³ **NOTE:** The basic needs approach is one of the major approaches to the measurement of absolute poverty in developing countries. It attempts to define the absolute minimum resources necessary for long-term physical well-being, usually in terms of consumption goods. The poverty line is then defined as the amount of income required to satisfy those needs. The 'basic needs' approach was introduced by ILO's World Employment Conference in 1976. Many modern lists emphasize the minimum level of consumption of 'basic needs' of not just food, water, clothing and shelter, but also sanitation, security education, health care and internet.

²⁴ **Note:** Underemployment is the under-use of a worker due to a job that does not use the worker's skills, or is part time, or leaves the worker idle. According to ILO Resolution adopted on 16th International Conference of Labour Statisticians in 1998 concerning the measurement of Underemployment and Situations of Inadequate Employment provides guidelines on two types of underemployment: time related underemployment, which is due to insufficient hours of work, and inadequate employment situations, which are due to other limitations in the labour market which limit the capacities and well being of workers. A person can be simultaneously in these two forms of underemployment.

areas of government—not just the areas in charge of labour and employment—and every part of the economy. It brings together various measures, programmes and institutions that influence the demand and supply of labour and the functioning of labour markets²⁵.

Governments need to consult widely to reach common agreement among all interested parties in the economy, including employers’ and workers’ organizations-Social Partners. Labour economists argue that, the majority of the poor in the region are working poor in the rural and urban informal sectors, who work long hours and combine multiple activities but are still unable to earn enough to meet their basic needs. Only a small fraction of the workforce in the region has regular, full-time wage employment. Poor workers are concentrated in those segments of the labour market where access to jobs is easier, but where returns on labour are low and employment is insecure and unprotected. The poor are highly heterogeneous. They work in many and varied working arrangements. Levels of poverty differ and poor households and their members adopt different strategies for survival. We have a duty an absolute duty to protect the marginalized population.

5.2 Policies to End Poverty and Inequality

The 2030 Sustainable Development Goal One is end poverty in all its forms everywhere while SDG Goal Ten is to reduce inequality within and among countries²⁶. These represent the widespread about the priority of addressing poverty and inequality. However, there are different views on what causes it and how it is best address. Poverty exists within and between nations, and global inequalities play a powerful role in shaping experience of poverty. The poor are deprived not just because they lack money but because they are disadvantaged in a range of ways that might include poor access to health and education, little sense of participation in social and political life, low self-worth, and so on. Innovation-led growth will also have implications for industrial and national inclusiveness, i.e. the extent to which the distribution of innovation capacities evolves evenly across the economy; between national firms, regions, universities and public research institutes. Different trends with regard to industrial and national inclusiveness can be observed in what are increasingly knowledge-based economies across the region.

The poor must equally have the capacity and the power to develop, protect and sustain their livelihood. This implies effective access to and control over resources; bargaining strength to compete with other interest groups for a better share of resources and benefits; and participation in the political processes which determine resource distribution in a country. Economic inequalities are most obviously shown by people’s different position within the economic distribution-income, pay, and wealth²⁷. Governments in the region should approach the topic of inclusive innovation through multiple routes. The following factors in table 6 are particularly important for the sustainability of inclusive innovations.

Table 6: Some of the Policies in Support of Inclusive Innovations

1	The countries in the region should supporting the use of advanced technologies – including also those that can serve as platforms for multiple services (such as cell telephony) by, for instance, incentivizing research institutions to orient research to developing inclusive innovations.
2	Governments and private institutions involving in innovation focusing on rural development, education, health or infrastructure need to create joint programmes in collaboration with governance structures.
3	Ensuring regulatory impediments do not prohibit or constrain innovations serving the poor -particularly with regard to public services at the same time as critical quality standards are being met accordingly.

²⁵ ILO (2015): National Employment Policies: A Guide for Workers’ Organization. Geneva.

²⁶ UN SDGs Goals 2016, New York.

²⁷**Note:** Economic growth is generally defined as an increase in Gross Domestic Product (GDP), either in total GDP or in GDP per capita. Some consider economic growth to be the key for the reduction of poverty, while others argue that it tends to lead to marginalization and greater inequality and poverty.

4	Developing credit options to smooth consumption patterns of the poor will be important mechanism to support catering to this market by providing firms with more stable income through predictable demand.
5	Addressing regulatory challenges that emerge when entrepreneurs that address the needs of low-income groups follow a perspective that is neither purely for-profit nor purely social.
6	Supporting intermediary institutions and other means of knowledge exchange to provide technical expertise to grassroots innovators and information on the needs of the poor to pro-inclusive innovators.
7	Firmly inserting inclusive innovation policies in the innovation policy agenda, thereby ensuring the joint objective of achieving growth and inclusiveness and policy coherence.
8	Developing financing mechanisms in support of inclusive innovation initiatives.
9	Addressing regulatory challenges that emerge when entrepreneurs that address the needs of low-income groups follow a perspective that is neither purely for-profit nor purely social.

Source: Authors compiled from different sources.

6. Inclusive Innovation-Poverty, Unemployment, and Inequality: OUR DUTY

We have a duty to understand that inclusive innovation presents both risks and opportunities in the region. In other words, we have a duty, an absolute duty to learn to live and work in the twenty-first century to minimise unnecessary suffering between and within population. Small and micro-enterprises are expected to be among the main beneficiaries from improved employment and labour market policies. As pointed out early that the United Nations (UN) scheme of geographic regions, five states constitute Southern Africa- Botswana, Eswatini, Lesotho, Namibia and South Africa. While the rich are getting richer, the poor are wallowing in need, and the backlash of this trend is threatening not only the little progress the region has made, but collective sense of humanity. Poverty subsequently fell in the region experiencing economic growth. Yet despite generally robust growth, nearly half the people still live on between US\$1-\$1.25 a day. The experiences with social grants have shown the importance of social protection programmes to tackle poverty. The reality is that millions who live in poverty, a US\$1.0 make a huge difference. It is unfair that the poor have to suffer because of the chronic mismanagement, poor planning, social instability and corruption.

We have a DUTY, absolute DUTY to advise governments to introduce microfinance for poor. It is widely accepted that the success of the microfinance model is based on constant efforts to provide sustainable credit services to geographically scattered and remote poor clients is important. Unlike higher-income groups in the formal sectors, these people often have neither collateral nor a credit history and may even sometimes lack verifiable identities. Experience also suggests that providing low-income groups with access to credit group lending with joint liability has been one critical solution in assisting the excluded. Granting of small loans through microcredit is important to the excluded because unlike other inclusive innovations, it is a more mature product that has undergone substantial experimentation and managed to reach significant scale towards supporting the poor.

The promotion of more and better jobs is a central element that cuts across many of the Sustainable Development Goals with SDG 8 at its core. It is OUR DUTY to assist regional governments in preparing national action plans to support the informal sector. It is OUR DUTY to assist governments to design and implementation of comprehensive national employment policies – in line with national needs and circumstances – can make a critical contribution to improve the policy frameworks needed to achieve SDG 8: Elements of these action plans include establishing a more business-friendly administrative, fiscal and legal framework, expanding training opportunities and promoting access to credit. The informal sector in the region can expand and develop to generate large numbers of productive and remunerative jobs in micro-enterprises and self-employment activities which have strong production and marketing linkages with the formal sector.

It is OUR DUTY, an absolute duty to protect informal sector. Experience suggests that informal workers tend to have low levels of education. This may mean that these workers have no choice but to work informally. Informal jobs tend to be of low quality, underpaid, insecure, and unprotected by basic labour standards or worker representation. OUR DUTIES is to reduce poverty and unemployment as studies have shown that where there is less inequality, the benefits of growth reach wider sectors of the population. In more unequal nations, however, the rich garner the biggest share and the poor get little.

According to a study by the United Nations Development Programme (UNDP), South Africa has the highest recorded level of income inequality in the world. Of the 19 most unequal countries in the world, 10 are in Africa - South Africa is number one followed by Namibia and Botswana. While Lesotho is on number six and Eswatini number seven²⁸. Income inequalities in the region differ by degree, but the more important distinction is the factors that shape them. The root causes of inequality are rarely the same from country to country and may include restricted access to land, capital and markets; inequitable tax systems; excessive vulnerability to unfavourable global markets and rampant corruption.

7. Conclusion

Widening income inequality and an increasing sense that the rules of the game are unfair threaten peace and security. Concrete policy changes to boost incomes of the low paid, improve their labour and social protection are among the antidotes to the rise in populism that we are witnessing. Growth contributes most to poverty reduction when it expands employment, productivity, and wages of poor people, and when public resources are spent on human development and physical infrastructure. Growth obviously does not help poverty reduction when a high proportion of the GDP is spent on servicing the public debt and maintaining a large civilian and military system. Everyone wants a stable, prosperous world economy. We all want to be able to look to the future with some sense of security. Everyone is concerned about such regional problems of poverty, unemployment and inequality including environment. Experience showed that the population in both urban and rural areas tend to benefit from sustained and high rates of growth only if they are given the opportunities to build or improve their physical, financial, and human assets. Adequate public investment in basic education, health, sanitation, and physical infrastructure, and a stable macro-economic environment for saving and investment, contribute greatly to this end.

Generally, very poor families spend three quarters of their income on food and much of the remainder on fuel, water, housing, clothes, transport fares and medical treatment. When their incomes decline, there are no luxuries to trim, only basic necessities. Weak and powerless people feel the economic pinch hardest, regardless of whether they live in rich or poor countries. In many African countries the low-paid workers, women, the young and the very old are most exposed to unfavourable economic trends. They have little power against broader economic forces. They are often in low-paid jobs, on fixed incomes or unemployed. They are the groups hardest hit by runaway inflation. There is widespread unease, and even despair, about the new economies and technological spaces we inhabit. So many people have yet to benefit, and in the developing countries there has been great dislocation, without a safety net.

²⁸ **Note:** More than two decades after South Africa ended racist apartheid system that trapped the vast majority of South Africans in poverty, more than half the country still lives below the national poverty line and most of the nation's wealth remains in the hands of a small elite. If you take the top ten percent in these countries, they live like Scandinavian countries. In general it's very high level even by European standards or even by U.S. standards. In addition to a huge problem with income inequality, these countries also have a significant problem with wealth inequality.

Governments in the region should use targeted programmes for the majority of the population that are not costly and can be implemented effectively in the short, mid and long-term. For example, land reform programmes that include land redistribution and adjustments in tenancy rights can have a significant impact on poverty reduction in the region. Good governance and strategies to combat corruption are essential for the economic and social progress of all countries in the region as most countries in the region face a crisis in economic management, poor governance and corruption. While corruption and fraud can never be justified, it is vital to consider them in the context of history as well as in the current global economic climate. Economic growth and good governance, coupled with sound macro-economic policies and structural reforms, must be encouraged under inclusive innovation. We have a DUTY to protect the human race to living in our circumscribed globe and to make something of it for them in the future. Poverty, unemployment and inequality can exacerbate the problem of holding governments accountable. In a society with high inequality those who are better off may believe that democracy will bring redistribution, and this redistribution means less economic and political power for them. The extent of poverty reduction depends on inequality levels and trends and a higher level of inequality leads to less poverty reduction at a given level of economic growth.

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The analysis and recommendations of the paper do not necessarily reflect the views of any organization either local or international. The paper is an independent work of the author. The author assumes full responsibility for the opinion expressed in the paper. Chrismlosy@gmail.com © Pretoria 2019. April 2019 US\$1=R13.75

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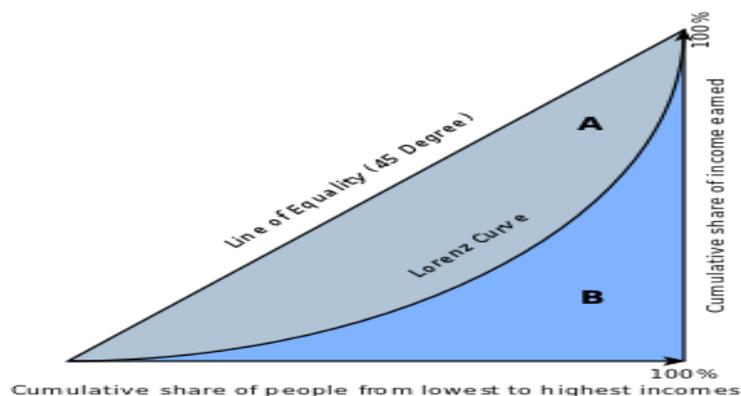
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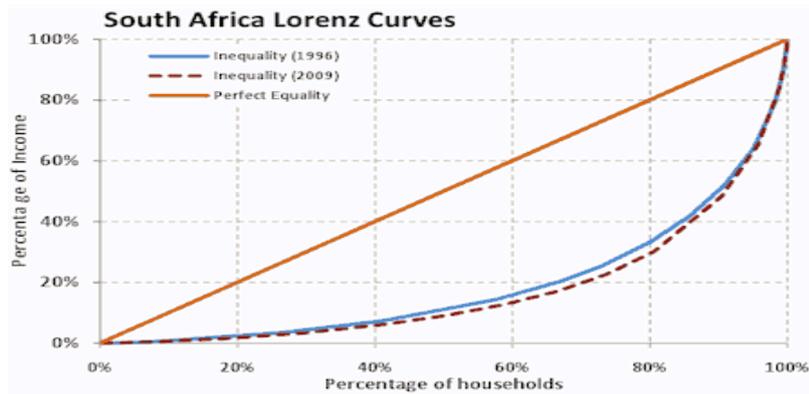
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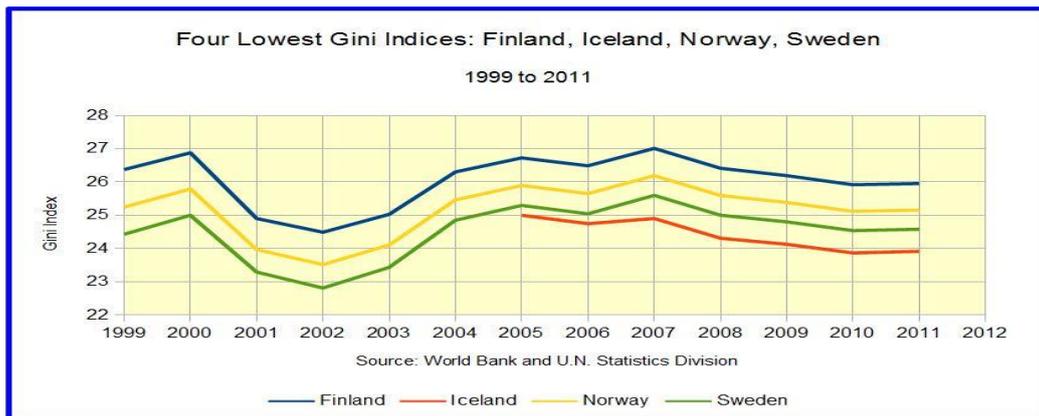
Appendix1: Graphical Representation of the Gini Coefficient



The most common measure of income inequality is the Gini coefficient or index (G), named after the Italian statistician Corrado Gini (1912). The Gini coefficient has a value between 0 and 1, with 0 being perfect equality (all have the same income) and 1 being perfect inequality (all income earned by one person). The graph shows that the Gini coefficient is equal to the area marked A divided by the sum of the areas marked A and B, that is, $Gini = A / (A + B)$. It is also equal to $2A$ and to $1 - 2B$ due to the fact that $A + B = 0.5$ (since the axes scale from 0 to 1).



Another commonly used measure of inequality is the Kuznets ratio. This gives the ratio between the average income of the richest and the average income of the poorest – typically undertaken by focusing on the averages of the top and bottom quintiles, i.e., the richest 20 % and the poorest 20 %. This has a clear intuitive meaning: how many times richer are the rich compared with the poor? The Kuznets ratio typically varies from about 5 for egalitarian European countries to more than 30 in some Latin American countries. Although popular, this measure is from a scientific viewpoint less satisfactory as compared to the Gini coefficient; because income changes in the middle range are ignored (e.g. a transfer of income within the 60 % in the middle would not affect the Kuznets ratio, but would change the Gini index).



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