



## Simplifying the Implementation of the Sustainable Development Goals (SDGs) in Poor Countries: the Centrality of Goal 8 and 9

- **Sustainable Development Goal 8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **Sustainable Development Goal 9:** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

### INTRODUCTION

This brief is focused on how to best achieve sustainable development under the situation of multiplicity and complexity of the goals and targets that need to be achieved by 2030: We see – as is seen elsewhere – the challenge of focusing on, and monitoring every individual goal of the 17 goals of this agenda. But does one really need to focus on every individual goal to achieve sustainable development – even though, at the end of the day, its achievement will depend on the achievement of the totality of all the 17 goals? The answer to this question – as will be shown in this brief – is no; one does not need to focus on all the 17 goals to achieve sustainable development, but rather on few that have greatest causal link and multiplier effect on others. These are: goals 8 on growth and employment, and 9 on industrialization and innovation, which we believe, have multiplier effect on sustainable development more than any of the other 17 goals for the poor countries. For Tanzania, these goals overlap with the objectives of the 5 years (2016/2017 – 2020/2021) development plan, which emphasises the role of the industrial sector in development. However, achievement of these goals pre-supposes a clear knowledge of the context and challenges that needs to be addressed, hence the importance of policy research in the implementation of the goals.

The Science, Technology and Innovation Policy Research Organisation (STIPRO) is an independent think tank engaged in independent policy research in science, technology and innovation (ST&I) in Tanzania with a view to contributing to the resolution of the contemporary and complex issues in ST&I for the purpose of informing ST&I policies in the country.

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Our starting point is a brief recapitulation of the essence and objectives of the SDGs as discussed in section 2 below; connect this to goals 8 and 9; and within this, argue for the centrality of innovation policy research in the achievement of the SDGs, the subject taken up in section 4.

### 2. Essence and overall objectives of SDGs

In essence, the SDGs replace the former Millennium Development Goals (MDGs) that ran from 2000 to 2015. By the end of 2015 some targets of the MDGs have been met and others have not. The SDGs, popularly known as Agenda 2030, builds on MDGs by moving beyond meeting basic human needs in order to promote dynamic, inclusive and sustainable growth that is capable of addressing environmental, social and economic needs of every individual in the world.

The Agenda 2030 consists of 17 goals and 169 targets addressing issues ranging from poverty eradication, food security, health, education, gender equality, water security, and access to energy, sustainable economic growth, resilient infrastructure, reduction of inequalities between countries, cities, sustainable consumption and production, peace and climate change issues. Close examination of these issues one realize that – most if not all – revolve around poverty, which has been a major subject of debate in individual countries and international organizations, even before the MDGs: Memories of poverty reduction strategy papers (PRSP), which unfortunately had less impact on poverty levels, are still very much fresh in the minds of many. Most importantly, even the current SDGs acknowledge the fact that addressing the issue of poverty is central to the Agenda 2030. In its preamble, for instance, the Agenda states:

*We recognise that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development* (emphasis added).

Effective eradication of poverty presupposes its proper understanding and effective measurement. Many definitions of poverty have been offered, and it is very difficult to pick any that is all representative, succinct and easy to operationalise. But, one thing is clear from these definitions and practical experience from those who lived/still live in poverty: poverty is all about incomes and resources. It is a state or condition in which a person or community lacks the financial resources to enjoy a minimum standard of well-being that is considered acceptable in society. Money is not everything in life, but used wisely, it is most of the things.

Defined in terms of economic wellbeing, poverty can be at the level of an individual, community, or a nation; although of course the poverty level of nations depends on the poverty levels of individuals and vice versa.

At individual level:

- With adequate financial resources one can acquire good education and associated capabilities that help in addressing many other challenges, including those that are non-material such as capabilities to participate in decision making;
- With financial resources one can access good health services and food security.

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Simply defining poverty in terms of financial resources also helps in designing practical policies that can effectively address poverty. Many scholars on poverty argue that failure in addressing poverty to a large extent stem from the ambiguous and varied ways in which it is defined (see for instance, Watts, ND). Presumably for the above reasons, this simple economic definition of poverty is more popular than other non-economic forms of poverty. In fact, this is how poverty is largely understood in MDGs. This however, is not a neglect of non-economic forms of poverty, but rather to argue that, to a large extent, non-economic forms of poverty can be addressed if the economic form is achieved. This is evident from comparing social and economic indicators between developed and developing countries. For instance, the level of inequalities within countries is much higher in poor countries than in rich countries; the rich countries are also more democratic and peaceful than the poor ones.

### 3. Critical importance of Goals 8 and 9 in the overall achievement of SDGs

In section 2 above, we have argued that to a large extent most of the goals of the SDGs can be addressed by effectively tackling the issue of income poverty in all countries. Looking at all the 17 goals one realises that Goals 8 and 9 are central in this as discussed below.

#### 3.1 Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

The centrality of this goal comes from its emphasis on growth which is a very important aspect in addressing poverty. Growth, in general, facilitates poverty alleviation. This happens because growth encourages increase in incomes which, in turn, pushes people out of poverty (Dollar and Kraay, 2002). The challenge is that this does not seem to be an automatic process; that is, faster growth is not always accompanied by faster poverty reduction, the fact we are now witnessing in some fast growing African countries:

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while they are growing at higher rate, poverty levels have stagnated; or even worsening in some countries (Diyamett and Musambya, 2014). Osmani (2003) have tried to explain the reasons for this discrepancy. According to him, there are three factors that affect the incomes of the poor in growing economies. The first is the growth factor (a necessary condition) which is the rate at which the production potential of the economy expands. The second is the elasticity factor which is the extent to which growth enhances employment potential. Third is the integrability factor, which is the extent to which the poor are able to integrate into economic processes in terms of productive employment and decent work; in other words, the extent to which growth is inclusive.

The observed trend in the currently growing economies in Africa is a result of the fact that growth is not coming from sectors that are potentially employment generating such as the manufacturing, but rather from exploitation of natural resources and service sectors that are not skill intensive and employment generating (Diyamett & Musambya 2014). Generally the countries have undergone premature structural transformation; that is, the economies have become service oriented without productivity increase in agriculture and transformation to manufacturing. For instance the structure of the economy for Tanzania is currently 48% service – largely from the low skill and less employment intensive sub-sectors, 23% industry, where manufacturing contributes only 9%; and 29% agriculture (UNCTAD, 2015). For growth to be employment generating, there has to be a process of positive structural transformation; that is movement of resources from low productivity to high productivity employment, while at the same time generating more employment in an inclusive way. It entails a transition of the economy from a reliance on low value-added sectors to higher value-added sectors. The normal process starts with a successful structural transformation where agriculture, through higher productivity, provides food, labour, and even savings to the process of urbanisation and industrialisation, and as economies move up the ladder of development, services sectors would gain importance (Timmer, 2007). Even the issue of peace, which is one of the goals of Agenda 2016, seems to depend on positive structural transformation: According to Singh (2006), for instance, the transformation process which follows the standard pattern is considered superior because along with raising productivity and standards of living, more comes institutional, organizational and cultural changes which make society as whole more capable, productive, innovative and peaceful.

#### 3.2 Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

The central issue in this goal is building sustainable industrialization, while resilient infrastructure and innovation are to a large extent instruments in this; the goal is therefore somehow connected to and a continuation of goal 8 above. The industrial sector includes the subsectors of manufacturing, construction and mining. However, when reference is made to positive structural transformation, basically what is referred to is the manufacturing sector, which is critical for employment generation. Overall observations of the process of structural transformation by many scholars and practitioners have revealed the critical importance of the

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manufacturing sector in growth and development because of its potential for employment and its unique multiplier effect. The multiplier effect of the manufacturing sector is stronger than other sectors due to its potential in creating employment. Apart from its own huge potential for employment generation, the development of the manufacturing sector stimulates demand for more and better services including banking, insurance, communication and transport, which leads to further job creation, resulting in to poverty alleviation. Empirical example of Malaysia is instructive here: In the 1980s Malaysia underwent a structural shift associated with a transition from an agrarian to industrial society. The shares of the agricultural and manufacturing sectors in their respective contributions to Gross Domestic Product (GDP) changed: Between 1960 and 2000 the agricultural sector's share of GDP declined from 40.5 to 12.8%, while the contribution from manufacturing rose from 8.2 percent to 34.7 percent (Khuo, 2010). Along with this transformation, employment in the Malay manufacturing sector increased from 17% in 1990 to 26.3% in 2000, while it decreased in agriculture from 36.7% to 18.2% (World Bank, 2004). Alongside the structural transformation was a dramatic reduction of poverty: At the beginning of the Sixth Malaysia Plan of 1991–1995, statistics indicated an official poverty rate of 17.1% (Malaysia, 1991: 32). By 2004, according to the Ninth Malaysia Plan 2006–2010, the incidence of poverty had fallen to 5.7% for all households (Malaysia, 2006: 329).

Positive structural transformation presupposes appreciable technological and innovation capabilities which are essential for productivity growth in agriculture, and a basis for increased value adding activities towards a vibrant manufacturing sector. This is a well known fact; but just for further justification, technological and innovation capabilities are lowest in countries which are growing fast, but have prematurely become service oriented (see for instance WEF, 2013). For Tanzania, the small manufacturing sector consists only of low tech sub-sectors with innovation activities limited to small increments (Diyamett, 2010, and Diyamett and Musambya, 2014). Low performance of the African agriculture is also connected to the low performance of the manufacturing sector because of the weak much needed backward and forward linkages between the two sectors. In the cited case of Malaysia, increase in agricultural productivity happened side by side with increased non-farm activities in the rural areas; largely around food processing ventures. Relevant policy lessons here is that Goal 8 and 9 are actually at the center of poverty alleviation, and more generally, Agenda 2030. But the goals can only be achieved through positive structural transformation and by building technological and innovation capabilities of poor countries. In other words, poverty alleviation is a process, and a process of building technological and innovation capabilities.

#### 4.0 The role of ST&I policy research in technological and innovation capability building

Technological and innovation capability building is about enabling firms and farms to move up the innovation capability ladder; that is enabling them to adopt imported technologies, to adapt them to suit local condition, combine indigenous and foreign knowledge to radically improve existing technologies; and finally be able to produce things that are radically new to the world. This process

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especially for poor countries, cannot happen through market mechanisms alone, but should be guided by the government through policies and incentive structures; and good and effective policies are always those informed by evidence – the whole purpose of a policy is to address existing challenges. Innovation being a complex, systemic and dynamic endeavour, requires high quality research to produce good evidence. However, very unfortunately expertise for such kind of research is very scarce in poor countries such as those in Africa, Tanzania inclusive. According to Lorentzen & Mohamed (2009), the poor countries hardly feature in innovation studies, and therefore existing relevant knowledge for innovation policy making is extremely scarce. According to Lorentzen & Mohamed, for instance, between 1997 and 2008, some major journals in the field of innovation published 849 articles on innovation, of which only 37 or 4% were on Least Developed Countries, including Africa; and authors of these few articles are largely from individuals outside the least Developed Countries, who may not know the context very well. The impact of scarcity of such knowledge and expertise is evident from the fact that at best ST&I policies in poor countries are informed by empirical evidence from more developed countries, and at worst are not informed by any evidence, but rather base on political statements that are not backed by credible evidence. This is a major reason why – despite long term existence of ST&I policies – some of the poor countries still live in abject poverty.

### 5. Conclusion and recommendations

In this brief, it has been argued and shown that indeed, goals 8 and 9 – buttressed by capacity building in science, technology and innovation of the productive sectors – are central to poverty alleviation and sustainable development in general. Given the fact that markets are not efficient for the production, dissemination and use of knowledge and technologies in poor countries, the government hand in terms of policies is indispensable. To be effective, the policies have to be evidence based; and the best evidence – innovation being context specific – is the one produced from the very context by the people who not only know the context, but have experienced it by living in it. Unless innovation policy research – a subject barely known and rarely accepted as important – is brought to the center stage of the implementation of SDGs, very little will be achieved towards poverty alleviation and sustainable development, more generally. The brief thus recommends the following policy actions:

1. Devote most of the resources set aside for the implementation of SDGs to the implementation of goals 8 and 9.
2. Focus on increased agricultural productivity while at the same time opening avenues for the non-farm activities in rural areas, especially the agro-processing.
3. Build innovation capabilities in the farming and the manufacturing sectors, including promoting interactive linkage and learning among farmers and agro-processors.

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4. Build capacity for innovation policy research for continuous follow up of the impact of innovation policies in both the agricultural and manufacturing sectors.

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