# TST Issue Brief: Sustained and Inclusive Economic Growth, Infrastructure Development, and Industrialization<sup>1</sup>

### 1. Stocktaking

Inclusive and Sustained Economic Growth. Economic growth is the *increase in the inflation-adjusted value of the goods and services produced by an economy over a given period of time*. In general, economic growth is critical for poverty eradication: Between 1990 and 2010 the global economy grew at an average rate of 2.7% per year while the number of people worldwide living on less than US\$ 1.25 a day fell from 43% to 21%, to around 1.2 billion people. An expanding economy, however, *does not necessarily mean that everyone benefits or benefits equally from the increased prosperity.* During approximately the same period, in sub-Saharan Africa, poverty reduction was accompanied by a rise in inequality, with the top 20% of the population increasing their share of income to more than half. OECD countries also saw growing inequality, with the gap between rich and poor reaching its highest level in 30 years, with the average income of the richest 10% of the population reaching about 9 times that of the poorest 10%. Inequality has also increased in a majority of European and Asian transition economies and South Asian and Middle-East and North African (MENA) countries. The Latin American and South-East Asian regions, which had seen large increases in income inequality during 1980-2000, experienced a marked decline in income inequality throughout the first ten years of the new millennium.<sup>2</sup>

Inclusive Economic Growth: Inclusive growth represents *growth that generates decent jobs, gives opportunities for all segments of society, especially socially excluded groups, and distributes the income and non-income gains from prosperity more equally across society.*<sup>3</sup> Besides contributing to human dignity and social cohesion, addressing rising inequality is growth enhancing *inter alia* through improvements in workforce education, skills and health. Economic growth continues to be necessary for prosperity but has to be inclusive to ensure the well-being of the entire population. Inclusive growth, while requiring poverty reduction, is a broader concept that also focuses on reducing inequalities and different forms of discrimination, including widespread exclusion and unequal access to growth's benefits of women and girls, persons with disabilities, some ethnic/linguistic minority groups, and entire regions and countries. Inclusive growth also requires full respect for human rights.<sup>4</sup>

<u>Sustained Economic Growth</u>: Sustained economic growth, in the sense of dynamic, enduring, or self-propelling growth, requires structural and especially technological change, that is, the ability of an economy to constantly generate new fast growing activities characterized by higher value added and productivity. Industrial development has been historically and continues to be for most countries an important phase of their growth process, especially in the transition from predominantly agricultural economies.

<u>Sustainable Economic Growth:</u> Inclusive and sustained *economic growth can improve the quality of life and avoid reaching physical limits if the environment is protected.* However, economic growth can be more or less resource-intensive and environmentally damaging. Over time, with technological advances, it has become and should continue to become less so. Yet, the sheer scale of global economic activity is placing heavy stresses on the Earth's natural systems, not least the climate system. Energy consumption per capita increased nine-fold over the last 200 years. Materials use per capita more than doubled over 1900–2005. Carbon emissions continue to rise at a rapid pace, and local and regional pollution and waste impose costs on human health and well-being in many parts of the world. Developing and deploying the technologies that will make possible low-carbon, sustainable growth entails structural changes for which many countries are not prepared. Easing labor market adjustments,

<sup>1</sup> Preparation of the brief has been co led by UNIDO, UNDP, UN-HABITAT and UNEP, with contributions from ESCAP, WFP, UNFPA, UNWOMEN, ITU, ILO, OSAA, OHRLLS, OHCHR, IFAD, ECE and UNICEF.

<sup>&</sup>lt;sup>2</sup> Cornia and Martorano, 2012. Development Policies and Income Inequality in Selected Developing Regions, 1980–2010, UNCTAD Discussion Papers, No. 210 December.

<sup>&</sup>lt;sup>3</sup> Inclusive growth is a multidimensional concept involving income and non-income related aspects. However, since some of the non-income dimensions of inclusive growth such as education (TST Issues Brief: Education and Culture), health (TST issues brief: Health and Sustainable Development), social protection (TST Issues Brief: Social Protection) or promoting social and gender equality (upcoming TST Issues Brief on Promoting Equality and on Gender Equality and Women's Empowerment) are dealt elsewhere, this Issue Brief will mainly focus on income and employment dimensions. This in no way should be construed as a diminishing of the importance of the non-income dimension.

<sup>&</sup>lt;sup>4</sup> The links between human rights and development are explored in detail in the upcoming TST Issue Brief: Human Rights, the right to development.

correcting market failures that under-reward investments in green technologies, and stimulating emerging green product markets are all functions that governments can perform to ease the transition to sustainable growth paths.<sup>5</sup>

Industrialization. Industrialization has a pull-effect on other sectors due to productive linkages. An expanding industrial sector enables economic diversification and fuels the demand for more and improved primary goods (agriculture, forestry, fishing and mining) and services (banking, insurance, communications, trade and transport). Agro industry, for example, provides capital and services to farmers (e.g. seeds, fertilizers and equipment, training, production and market information), promotes entrepreneurship and creates jobs, adds value through agroprocessing, and connects farmers with markets through the handling, marketing and distribution of agricultural products. As a result, the productivity, diversity and quality of agricultural production, farm returns, economic stability for rural households, food security and innovation throughout the value chain can be enhanced. An efficient agro-industry, combined with enhanced investment in agriculture, can help spur agricultural growth and, especially where focused on smallholders who rely upon land for their livelihoods, it can increase farmers' incomes and jobs and reduce food insecurity and malnutrition. As opportunities for income generation are more restricted in rural areas, where 75% of the poor still live, rural non-farm earnings from agro-processing and related service and trading activities can significantly boost household incomes. For developing countries as a whole, non-farm earnings already account for 30 to 45% of rural household incomes but this proportion could be increased more if processing plants and ancillary activities were to be expanded. With low capital requirements and undemanding local marketing channels, the rural non-farm economy offers openings for poor households (particularly women headed households), small-scale farmers and other smallholders, representing an important instrument for rural poverty eradication and transitioning from the informal to the formal economy.

Industry is an important vehicle for *technology development and innovation.*, representing a hub for technical progress. Empirical evidence shows that manufacturing is, by far, the sector in which most R&D investment is undertaken.<sup>6</sup> It is recognized today that this type of investment has positive externalities that go far beyond the productivity gains achieved in the same sector, contributing significantly to productivity growth in other sectors and thus fueling overall economic growth.

Structural change and the development of widespread productive capacities are also crucial to dealing with the cyclicality and volatility of world markets. Economies go through periods of boom and bust. They confront shocks arising from rapid changes in import and export markets or from the level and direction of international financial flows. Financial markets have become more unstable than ever before. While all countries are affected by crises, developing countries are particularly vulnerable to shocks because of the precarious economic conditions they face. Diversified economies are less vulnerable to rapid changes in economic conditions and more resilient to confronting related shocks.

<u>Inclusive and Sustainable Industrialization:</u> By increasing the potential for decent job creation in high productivity sectors and thereby progressively improving wages, *industrial structural change not only sustains economic growth but also has potential to make it inclusive.* Globally manufacturing accounts directly for around 15-20% of total employment, with manufacturing's potential for direct employment generation inversely related to the level of income per capita. Least developed and other poor and vulnerable countries can often find substantial employment opportunities by shifting from agriculture to labor-intensive industries while middle and high income countries can grow jobs by shifting towards more technologically advanced industries and the services surrounding them. Yet, industrialization's employment impact will be significantly multiplied through the strong productive linkages that manufacturing has with other sectors

As labor shifts from agriculture to higher value added and higher productivity sectors, wages, skills, labor conditions and opportunities for female employment can all be upgraded. Historical evidence for the advanced economies and

<sup>&</sup>lt;sup>5</sup> For a full treatment of the environmental implications of growth and development please refer to the Issue Briefs on Desertification, Land Degradation and Drought and in the upcoming Issues Brief on Sustainable Consumption and Production (including chemicals and waste), on Climate Change and Disaster Risk Reduction, on Oceans and Seas, on Forests and on Biodiversity.

<sup>&</sup>lt;sup>6</sup> Lavopa, A., & Szirmai, A. (2012). "Industrialization, employment and poverty", *UNU-MERIT Working Paper Series*, No. 2012-081, Maastricht.

the successful newly industrialized countries shows that the improvement of wages associated with structural change due to industrialization helped greatly in pulling large sections of the population out of poverty. As industrialization proceeds, the quality of jobs improves even more. Besides having higher wages, more advanced manufacturing jobs typically provide better benefits (e.g., retirement plans, paid holidays, etc.) and security (e.g., life insurance, health insurance, etc.) than low-wage jobs .

Besides making industrialization inclusive, there is a need to respond to environmental concerns by increasing resource efficiency in production. For most industries the latter has also become a core determinant of economic competitiveness and sustainable growth. Since resource inputs represent an important cost of production for industries, efficiency improvements can be a significant lever for competitive advantage. Investments in improving resource efficiency and recycling reduce the demand for energy, water and virgin resources, thus reducing the need to invest billions on new energy and water supply infrastructure. For example, The International Energy Agency (IEA) estimates that, if countries focused on boosting energy efficiency, they could not only provide a 10 per cent reduction in global energy demand by 2030 but also save US\$ 560 billion.

#### Infrastructure Development.

Ensuring sustained, inclusive and sustainable growth through industrial structural transformation requires investments in economic and other infrastructure.8

- Information and communication infrastructure, including broadband infrastructure the information superhighways on which the global digital economy is being built;
- Energy and piped gas, piped water supply, sanitation and sewerage, and solid waste collection and disposal;
- Roads and major dam and canal works for irrigation and drainage;
- Other transport sectors-urban and interurban railways, bus rapid transit and other urban transport, ports and water ways, and air transport;
- Infrastructure for health care, education and skills development, etc.

Adequate economic infrastructure improves productivity and reduces the costs of existing and new productive activity. Good infrastructure also helps saving on logistics costs and palliative investments such as electricity generators; on the time to get to work or to organize production processes with the attendant effect on labour productivity; on communication and information exchange time and costs; and on health expenditures due to less stress and better environmental conditions. Recent developments in ICTs and broadband networks are particularly suited to support the expansion of productive activity. For example, the World Bank (2009) notes that a 10% increase in broadband penetration increases GDP growth by 1.4% in developing countries, on average. The availability of infrastructure may help to attract investment, deepen markets and generate agglomeration economies through attracting productive capacity to a specific location. Located in places where disadvantaged groups are situated and when affordable access is addressed, energy, water, roads and communication facilities will have a direct impact on reducing inequality and making growth more inclusive. Gender sensitive or tailored health and social infrastructure, for example, can improve the security of women and girls and help their free movement and education. Proximity between jobs, residential locations and infrastructure, especially in disadvantaged areas, will contribute to narrowing spatial disparity and improve economic opportunities for all.

The processes of industrialization have and will continue to take place against, and perhaps due to, *large shifts in the spatial distribution of people.* In 2009 the world achieved a historical landmark when the population living in towns and cities reached 50%. Urbanization, which over recent years has taken place mainly in developing countries, is posing both challenges and opportunities for inclusive and sustained growth and structural change. Some cities are growing at rapid and unmanageable rates resulting in large and growing slum areas; overcrowding and pollution; unhealthy and unsafe environments; and inadequate housing, energy, health, water and sanitation, transport and leisure facilities. They are also highly vulnerable to the effects of climate change. Yet, where properly governed, managed and planned, *spatial inclusion* can be achieved as the concentration of people allows for

<sup>&</sup>lt;sup>7</sup> Sustainable Europe Research Institute (SERI). 2009. Resource efficiency for sustainable growth: global trends and European policy scenarios. Background paper for "International Conference on Green Industry in Asia, September 9-11, 2009, Manila.

<sup>&</sup>lt;sup>8</sup> Aspects of social infrastructure are dealt with at length in other issue briefs.

cheaper and more efficient provision of services and infrastructure and easier communication and knowledge exchange. Population concentration lies at the basis of the innovation capacities and the agglomeration economies necessary for industrial and economic transformation and, hence, provides the potential for huge improvements in human wellbeing. To ensure environmental sustainability, infrastructure development should take into account the carbon constraint, energy security, and the need for climate adaptation.

#### 2. Overview of proposals

The *MDGs were inspired by 'humanistic' and social justice views that put people at the centre of development.* They drew on Sen's capability approach, where he argues that development should aim at expanding people's capabilities – their freedom to choose valuable "beings and doings" (which range from simple states such as keeping healthy or having a good job to more complex conditions such as being happy or having self-respect). The upshot of the emphasis on human and social development was a set of goals that related to reducing poverty and improving education and health in developing countries, but did not pay any "serious attention to the transformation of productive structure and capabilities." 11

It is important that emphasis on economic growth as a driver of development accompanies emphasis on the social dimension of development. Making things is a major source of human fulfilment and freedom. It satisfies the need for being creative and contributing to society through inventing, designing, building and working on products and services. It also often satisfies needs for social interaction and learning as the knowledge required for production is generated collectively in organizations through communication and exchange of views. Sen considered economic facilities, that is, the opportunities that individuals enjoy to utilize economic resources for the purpose of consumption, production, or exchange, as one of the 'instrumental freedoms' that are a crucial component of overall freedom. Hence, adding value may not be construed only as a means but also as an end.

The Rio + 20 outcome noted *the importance of, and complementarities and linkages between, the economic, social and environmental dimensions of sustainable development and called for a new development agenda rooted in the core values of equality, sustainability and human rights.*<sup>12</sup> Early on in the text the document reads: "We therefore acknowledge the need to further mainstream sustainable development at all levels, integrating economic, social and environmental aspects and recognizing their inter-linkages, so as to achieve sustainable development in all its dimensions." As the world considers how to move beyond the expiration of the MDGs in 2015, the opportunity arises to *anchor, among other things, the central role of economic growth and structural transformation in the post-2015 development agenda.* There is growing support for this view in emerging proposals and the current post-2015 development discussion:

The role of inclusive and sustained economic growth to address different aspects of the post-2015 development agenda has been highlighted in a number of proposals. *The HLP Report suggests as one of the indicative goals to "Create Jobs, Sustainable Livelihoods and Equitable Growth"*The report stresses that a quantum leap forward in inclusive and sustained economic growth is necessary to create employment, particularly for the youth, and reduce poverty. Countries must strive to add value and raise productivity through industrialization and its concomitant capacity to produce a progressively higher quality and a greater range of products, to absorb new technologies and to innovate, as well as by modernising agriculture and services. Growth and industrial structural change will be accelerated by investments in infrastructure and skill development. *The UN Global Compact Report makes a* 

<sup>10</sup> The UN's Secretary General Millennium Report that underpinned the MDG's formulation emphasized the "...dignity and worth of the human person, respect for human rights and the equal rights of men and women, and a commitment to social progress as measured by better standards of life, in freedom from want and fear alike." (Annan, K. A., 2000. "We, the Peoples", the Role of the United Nations in the 21st Century. United Nations. pg. 6.)

<sup>&</sup>lt;sup>9</sup> Sen, A., 1999. *Development as Freedom*. Oxford University Press.

<sup>&</sup>lt;sup>11</sup> Chang, H., 2010. "Hamlet without the Prince of Denmark: How development has disappeared from today's "development" discourse", in S. Khan & J. Christiansen (eds.), *Towards New Developmentalism: Market as Means rather than Master*, Routledge, Abingdon, 2010.

<sup>&</sup>lt;sup>12</sup> UN General Assembly 2012. *The Future we Want.* Resolution adopted by the General assembly. pp. 2

<sup>&</sup>lt;sup>13</sup> UN General Assembly 2012. *The Future we Want.* Resolution adopted by the General assembly. pp. 2

<sup>&</sup>lt;sup>14</sup> UNHLP, 2013. A New Global Partnership: Eradicate Poverty And Transform Economies Through Sustainable Development. United Nations.

similar proposal as its first development goal: "End poverty and increase prosperity via inclusive economic growth". The rationale is that only economic growth that is inclusive can allow individuals to reap the benefits that markets and entrepreneurs provide and to improve on their self-esteem.<sup>15</sup>

Other documents emphasize the need for structural transformation. The *draft report of the Growth and Employment in the Post-2015 Development Agenda Thematic Consultation* led by the UN Development Group states that current economic structures in most countries are not suited for sustained job creation and raising incomes and that transitioning from the production of agricultural and mineral commodities towards sectors with higher value-addition in manufacturing and services, or from low-skill to high-skill manufacturing, is critical to sustained growth and development. A recent report by *ECA and the African Union entitled "Making the Most of Africa's Commodities: Industrializing for Growth, Jobs and Economic Transformation"* contends that industrialization is not merely one of several options for Africa, but in fact is the only choice for creating the large quantity of jobs – at least 10 million per year – that will be needed in the decades ahead to reduce and finally eradicate poverty while also meeting other development goals. The "Framework for Sustainable Development" makes the link between future industrialization and urbanization by pointing out that the establishment of sustainable cities will be a major vehicle to attract internationally mobile industries as well as determining the quality of employment and life. Finally, UNEP's Green Economy Report adds that achieving long term sustainable development requires greening the economy, which helps to improve human well-being and social equity and the reduction of environmental risks and ecological scarcities.

## 3. The way forward

Goals, targets and indicators. The inclusion in the post-2015 development agenda of a goal related to "accelerating sustained economic growth that is both inclusive and sustainable" is an option that should be strongly considered. There is intrinsic value in increasing the availability of goods and services especially to the poor in an economy and, given current worldwide employment generation challenges, it is particularly topical to bring the issue of creating and expanding sustainable productive capacities back to the core of the development agenda. Doing so will show the capacity of the international community to learn from experience and reinstate one of the key factors for achieving prosperity back on an equal footing with other similar factors.

In the past growth was discussed exclusively from an economic perspective. Achieving high rates of growth (in terms of countries' standard measure of progress, that is, Gross Domestic Product) regardless of the distributional or environmental implications was the conventional wisdom. This is no longer the case. Years of research and experience have shown not only that there can be dire distributional and environmental effects of growth but that those can in turn affect growth negatively. Societies need to assess the performance of their economies not exclusively on the basis of GDP or its growth. Hence, the need for framing a growth goal in the context of sustainability, equity and human rights principles. A goal that encapsulates sustained economic growth, social inclusion and environment protection aspects will also provide the much sought integration, universality and simplicity to the SDGs. Sustained economic growth targets can be developed on the basis of industrial growth and structural transformation quantifications, e.g. shifts in economic structure. Job creation and social inclusion targets could be linked to specific equity aims like changes in Gini coefficient, poverty reduction, declines in economic vulnerability or increases in employment -- especially of women and youth; improvements in the quality of jobs and decent work and reductions in gender wage gaps. Environmental protection achievements could be related to

<sup>&</sup>lt;sup>15</sup> UN Compact Group, 2013. *Corporate Sustainability and the United Nations Post- 2015 Development Agenda*. Report to the Secretary General by the United Nations Global Compact.

<sup>&</sup>lt;sup>16</sup> UNDG, 2013. The Global Conversations Begins, Emerging Views For A New Development Agenda. Draft Report on Growth and Employment in the Post-2015 Development Agenda: Key Messages from the Thematic Consultation. United Nations Development Group.

<sup>&</sup>lt;sup>17</sup> Economic Commission for Africa, 2013. Economic Report on Africa. Making the Most of Africa's Commodities: Industrializing for Growth, Jobs and Economic Transformation.

<sup>&</sup>lt;sup>18</sup> Sustainable Development Solutions Network , 2013. The Structural Transformations towards Sustainable Development. Background paper for the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda. Secretariat of the Sustainable Development Solutions Network.

<sup>&</sup>lt;sup>19</sup> UNEP, 2011, *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*, www.unep.org/greeneconomy.

reductions in energy intensity and emissions and/or material use per unit of output, which could also be calculated at sectoral level. Measurable indicators could then be designed for all countries but cascaded down taking into consideration countries' individual realities, as diversity of national conditions will have to be respected.

Key challenges in designing an inclusive and sustainable economic growth related goal and its targets and indicators refer to definitional and placement issues. The definitional issue is whether economic growth is a means or an end. As already mentioned, much of the discussions around the MDGs considered economic growth as a means. Lack of clarity on whether economic growth is a mean or an end reflects the absence of a theory or framework that maps out the underlying causalities and development mechanisms. Even if economic growth were a means, there may also be a need to have key development means as goals, because of their importance in addressing fundamental ends such as poverty and hunger eradication. As to placement, difficulties may arise as to under which goal to place a specific target. For example, a female employment share increase target could well be placed under an economic growth, employment or a gender equality goal.

**Data Availability.** An inclusive and sustainable economic growth goal is relatively easier to grasp as the population at large is acquainted with basic economic data. Basic statistics are available for some of the possible targets and indicators related to production, distribution and use of resources, *so initially it will not be necessary to generate significant amounts of new data*, except perhaps in some areas of environmental protection, where fresh figures may have to be collected for specific targets and indicators. Some work may be necessary, however, for developing new indicators based on existing data including, if deemed necessary, for devising composite indices.

Having said that, an inclusive and sustainable economic growth goal may also lead to overall improvements in the collection and dissemination of statistics and galvanize already existing efforts to device new and more realistic measures of economic progress. More elaborate targets and indicators may require disaggregated data by gender, geography, income, industry and other categories, which is not always available. For example, current employment statistics in developing countries could be further improved to reflect better their labour markets and

gender-disaggregated information on the sector, duration, security and quality of employment and data on the level

of wages and earnings are especially lacking.

A new development goal focused on inclusive and sustainable economic growth may be a *catalyst for measurements including market and non-market transactions to properly assess the contribution of all family members, including women, to emerging growth trends.* Properly measuring production will be essential for monitoring economic activity.<sup>20</sup> Similarly, an inclusive and sustainable economic growth goal will require governments and businesses *to account for their social and environmental footprint* and support existing UN efforts to promote corporate social responsibility, such as the System of Environmental-Economic Accounting adopted by the UN Statistical Commission in 2012, the UN Guiding Principles on Business and Human Rights and the UN Principles for Responsible Investing.

The role of the State in development. The extent of structural transformation required for sustainable growth raises the question of *what is the role of governments in supporting the private sector to generate such shifts.* According to one view governments should *limit themselves to provide an enabling environment for businesses* by securing property rights, enforcing contracts, streamlining procedures for starting new enterprises, putting in place effective legal processes for dispute resolution and, under certain circumstances, providing reliable infrastructure. In this view governments can legitimately intervene in cases of market failure, due to information asymmetries, existence of public goods, externalities and/or lack of competition.

There is, however, an alternative view that argues that rapid structural transformation and inclusive and sustainable industrialization can only be achieved if *the state takes a proactive role in development in order to complement* 

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 $<sup>^{20}</sup>$  Stiglitz, J., Sen, A. and Fitoussi, J., 2012. Report by the Commission on the Measurement of Economic Performance and Social Progress. Avaliable at < www.stiglitz-sen-fitoussi.fr>

and/or nudge the private sector into action. In this case the state intervenes more 'strategically' in the economy to promote the growth of new industries and to reduce the dislocations caused by shifts in investment and profits from old to new industries. The government's role includes providing incentives that accelerate a process of discovering and developing successful sectors as well as filling the gaps where the private sector is reluctant to enter into risky but potentially successful and productive activities. At the same time governments may need to provide social services, redistribute gains from growth and protect people and markets from shocks in order to ensure that the benefits of prosperity reach all. States are also expected to enshrine in law the obligation to fulfil human rights and well-being of their people. The mechanisms of intervention by 'developmental states' vary from country to country, ranging from planning and direct state intervention to government regulation to government support for poorly functioning or incomplete markets.

**Policy content**. Accelerating inclusive and sustainable economic growth will require a broad set of policies at the national level. There are four types of policies that deserve special attention:

- Building productive capacity: Governments will need to support expanding the supply of food and achieving food security without significant increases in land or water use by increasing agricultural productivity and reducing food losses and waste through public investments in rural infrastructure, research and development, provision of extension services -- including the spread of sustainable farming methods, and improving access to a range of financial services and financial capital. Special care will have to be given to industrial development given its key role in structural transformation. Fiscal or financial incentives that promote increasing productivity, reallocating resources towards higher value added products and industries, diversifying industry and expanding linkages with primary sectors will be necessary. Specific industrial policies may be needed for agro-industry. Policies aimed at positioning industrial firms at the right stage of global value chains so that they can profit from international trade in intermediate and semi-finished products will be crucial too.
- Technology and innovation policies: Industrial structural change is fundamentally a process of continuously incorporating knowledge into production and creating the new products and processes that will result in new activities or industries. Technology and innovation policies will vary significant depending on the income per capita and technological capabilities of different countries, with more advanced countries involved in advanced research and new product development and less advanced countries focusing on imitation, generating local absorption capacity, product adaptation and process technologies. Government backing for technology and innovation will include supporting and financing R&D investments; public funding and tax support for technological entrepreneurship and start-ups and for businesses developing new products and processes; promoting eco-innovation and green technologies; investing in professional and technical education in the fields of computer science and mathematics, engineering, and life and physical science; intellectual property protection; promoting technology transfer between research institutions and businesses and across countries; and, introducing measures aimed at expanding the demand for innovation.
- Infrastructure development policies: Providing and maintain infrastructure is one of the key government roles because of the positive externalities. In providing infrastructure, however, governments face several public policy dilemmas. The first is whether to utilize primarily public or private, domestic or foreign funds to finance infrastructure investments. Historically, infrastructure has been mainly funded from local government revenue and borrowing, followed in the case of developing countries by international public finance mainly channeled through international financial institutions. However, over the past few decades a larger share of funding has come from international and domestic private sources, but especially since the financial crisis accessing private finance for large infrastructure projects has become more difficult. There is also the issue of whether to provide centrally or decentralized (sub-national level) infrastructure given the very different cost implications; very often the answer will differ between high-density urban areas and less populated rural areas. A related issue is whether to establish a cross-country regional infrastructure and how to cooperate for its provision. Finally, there are dilemmas linked to subsidized provision and how to improve targeting to benefit the poor.
- Financial policies: Sustainable growth needs long-term predictable funding mechanisms as they focus on productive investments, capital formation, infrastructure and innovation. Policies must focus on three areas: supply of long-term funding, intermediation, and credit for SMEs. In terms of supply of funding, the main task is to increase the availability of investment financing through the reduction of costs and risks, and increasing the

efficiency, of the financial system. Expanding the role of domestic development and investment banks would be an important step in this direction. In terms of improving intermediation, it is essential to create new trading venues; enhance transparency and information efficiency; introduce regulation and stricter requirements to reduce short-term and speculative financial trading activities; and, improve investor protection. Regarding SMEs, the challenge is to increase access to credit and insurance services through dedicated and varied funding mechanisms, including venture capital, introducing new securitisation mechanisms and developing standards for credit assessments of SMEs.

Social policies: Economic growth policies need to be complemented with a commitment to social inclusion
through social policies and social protection, policies aimed at sharing care more equally between men and
women, guaranteeing equitable access to education for all, addressing inequalities and the specific needs of
excluded groups, such as women, empowering individuals and social groups, assisting those affected by
natural disasters and displacement.

Economic growth and structural transformation does not mechanically translate into widely shared gains. Improving inclusiveness is a complex process that depends on multiple factors. Specific approaches and instruments aimed at shifting resources towards dynamic activities such as competitive exchange rates, current and capital account as well as domestic demand management, taxation and banking regulation generally achieve the twin objectives of economic growth and inclusiveness. Yet, well-intentioned policies for all can have deleterious effects on specific groups of the population, if they are not based on social and environmental impact assessments. This is where the policy process becomes important.

Policy process. Policies must not only be well designed and thought out but also ought to be legitimate. Legitimation is about ensuring widespread acceptance of the policymaking process and avoiding rent-seeking and corruption. If stakeholders do not feel like they have ownership through their active involvement and do not see progress as a result of their contributions and inputs, the policy process may not lead to the desired outcomes and could result in a subsequent withdrawal of participants. An open, collaborative and transparent decision-making and social dialogue process that is trusted is thus essential. Legitimizing the policy process is consistent with modern governance principles.

**Policy coherence and coordination.** Policies aimed at expanding inclusive and sustainable economic growth in one country may affect the outcomes in other countries, so some degree of international policy coherence and coordination is necessary to avoid beggar thy neighbour situations and to ensure that countries upgrade their technological capabilities in timely fashion. Global trade liberalization, including the provision of duty-free, quotafree market access for LDCs, international finance, international migration<sup>21</sup> and mechanisms for international transfer of technology are areas that benefit from international coordination.

Partnership(s) for development. Policies aimed at expanding inclusive and sustainable economic growth should rely on predictable and sustainable international financing. Therefore, external resources such as ODA commitments should be met, as was reaffirmed at Rio+20. Multilateral banks should be key actors in enhanced sustainable development financing, and new mechanisms of long term investment finance such as the 100US\$ billion per year green climate fund need to be implemented. South-South Cooperation should be promoted as a complementary source of international financing and knowledge sharing. Multistakeholder partnerships have a valuable role to play as well in supporting countries' progress towards Sustainable Development Goals.

<sup>&</sup>lt;sup>21</sup> Issues Brief: Population Dynamics examines the positive impact of migration on economic development.