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Means of Implementation: An Indian Perspective

Introduction

The Special Session of the UN General Assembly in September 2015 endorsed the 2030 Agenda for Sustainable Development, widely regarded as the Post 2015 Development Agenda. World leaders have already pledged their commitments to this agenda. India is a serious partner and as owned up to this agenda. This agenda comprise the Sustainable Development Goals (SDGs) which is a set of 17 goals and 169 targets integrated and indivisible in the universal sense. The SDGs are slated to be built upon the Millennium Development Goals (MDGs) which were adopted in 2000 as a set of eight goals on diverse dimensions with most direct relevance to welfare, development and sustainable use of resources globally.

This new agenda has an explicit focus on Means of Implementation documented separately in the proposed declaration. To draw up a solid roadmap on means of implementation, these have been recognised under each of the SDGs and as the final goal by itself (Goal 17) with specific targets addressing the following issues: finance, technology, capacity building, trade and systemic issues. While Goal 17 talks about the national policy space, the global agenda to strengthen means of implementation receives overwhelming attention. World leaders this time under this new agenda have pledged a high level of commitment in terms of a meaningful global partnership in support of implementation of all the Goals and targets, bringing together Governments, the private sector, civil society, the United Nations system and other actors and mobilising all available resources. India has supposedly been actively involved in the negotiations

of the Goal 17 (on means of implementation and global partnership) to champion a leadership position among developing countries, and on purpose. India strongly supports an agenda of progressive reforms of the global institutional architecture governing economics, technology and environment. The world has already experienced shifting of the global centre of gravity from North towards South in several areas. In this paper we explore India's possible future strategy to achieve the SDGs and the role it might play in global governance architecture on some of the issues mentioned above.

Transition from MDGs to SDGs: Global Partnership Issues

The MDGs encapsulated eight globally agreed goals in the areas of poverty alleviation, education, gender equality and empowerment of women, child and maternal health, environmental sustainability, reducing HIV/AIDS and communicable diseases, and building a global partnership for development. The MDGs were to exhaust its time period in 2015 and hence the relevance of a new agenda and a new set of goals. The MDGs were meant to eliminate extreme poverty and deprivation and ensure sustainable use of energy and water under a fruitful global partnership that could facilitate this process. The UN system was at the forefront for initiating the MDG process and ensuring adoption of the MDGs in the developing world and in the relatively poorer countries. However, SDGs has been an outcome of an intensely negotiated process at the UN by all member states since 2012, since world leaders pledged to a new development round post-2015 at the Rio+20 conference.

The SDGs are much expanded compared to the MDGs and covers all three dimensions – social sector development, economy and sustainability across 17 goals. This has led to views suggesting SDGs to be overly ambitious. The 2030 Agenda for Sustainable Development promises to connect 5 Ps – People, Planet, Prosperity, Peace and Partnership. The SDGs are universal, integrated and interlinked, and pledges to leave no one behind. While, the first set of the SDGs (1-7) may be an extension of the MDGs with a more comprehensive mandate of mitigating developmental challenges in key sectors in all their forms, the later goals could be referred to an extension of the agenda itself. These in turn have two distinct characters. Those immediately following the first 7 goals (8, 9 and 10) are referred to as enablers of development covering areas like inclusiveness and jobs, infrastructure and industrialisation, and distribution. The final set of goals under the SDGs (11-17) lays down the framework for sustainability covering areas like urbanisation; consumption and production; climate change; resources and environment; peace and justice; and means of implementation and global partnership. However, the two final goals are sometimes referred to as meta-goals as they set the preconditions for every other goal.

MDG 8 that rightly focussed on global partnership failed to adequately promote human development within the global economy given highly skewed global governance architecture on trade, finance and technology. Therefore, at the conceptual and operational level SDGs may not merely be an extension of the 8 MDGs, but are slated to focus on global systemic reforms to remove main impediments to development and secure an accommodating international environment for sustainable development. In this direction, the Third International Conference on Financing for Development (FfD3) at Addis Ababa, Ethiopia (13-16 July 2015) as mandated by the UN General Assembly has been much timely as it rightly prioritised the most crucial issue, i.e. financing of development ahead of the formal adoption of the Post-2015 Agenda and the SDGs. The FfD3 was also perceived to be much important prior to the UN Climate Change Conference in Paris (COP21), in December 2015. The FfD3 concluded with the Addis Ababa Action Agenda which is now considered integral to the 2030 Agenda for Sustainable Development.

While implementation of the SDGs rests with individual countries, the developing world must have access to adequate resources. Fulfilment of objectives under this agenda may be critically hinged on successful North-South Partnership and South-South Cooperation. For obvious reasons, SDGs are unique for having accommodated much larger spectrum of views and concerns of the developing world and is mandated to be a universal agenda with obligations for both the developed and the developing countries. The process per force necessitates national ownership of this agenda towards its fulfilment in the next 15 years. G77, China, India and some of the other emerging counties have taken an active part in the negotiations around the Post 2015 Development Agenda and have vehemently highlighted the importance of finance and technology for successful delivery of a global development agenda. We discuss the two issues in some detail.

Financing Development, Domestic Resource Mobilisation and Global Tax Issues

Limits to Financing Development through Aid

Availability of long term finance for development from a global perspective is a key issue.¹ Long term finance for development is essential for rapid progress in achieving key developmental goals and targets universally. The conventional sources of finance supporting private interest driven economic activities is not expected to serve these ends. Raising capital or savings for investment in the social sector is particularly difficult unless mediated and therefore, developing countries and least developed countries are at serious disadvantage in this regard.²

The decline in Official Development Assistance (ODA) in relative terms (as percentage of combined gross national income (GNI) of the Development Assistance Committee (DAC) member states) since 2011 has been a matter of grave concern. In 2011, members of the DAC of the OECD provided US\$ 133.5 billion of net ODA, representing 0.31 per cent of their combined GNI. This was a 2.7 per cent drop in relative terms compared to 2010, the year it reached its peak. In 2012, DAC provided US\$ 125.6 billion in ODA, representing 0.29 per cent of their combined GNI, again a 4 percent drop in relative terms compared to 2011. In subsequent years, 2013 and 2014, the relative ODA

from DAC has remained lower than the 2011 levels. For a major emerging economy like India, ODA from DAC members stands at 0.09 per cent of its GNI. India, thus, needs to mobilise resources through means other than ODA.

While this trend has been accentuated by the global economic and financial crisis, development in the South is critically linked with expansion of domestic capabilities including production capacities that depends on the availability of finance. The failure on the part of the developed countries to meet their own commitments that they had set for themselves under ODA should certainly be a disappointment for them; it nevertheless translates into tragedy for all those who depend on ODA. It has been highlighted that financing for development (which includes ODA) is distinct and should not be mixed with other areas of financial support for developing countries like climate financing and humanitarian aid. Moreover, the states have to come up with the resources needed for development and the private sector cannot fill in the gap. The FfD3 stressed upon unlocking of domestic finances, but did not fully succeed in bringing in new resources on table.

In the immediate neighbourhood i.e. South Asia, which shares bulk of developmental and sustainability challenges with India and suffers from gaps across indicators resource mobilisation has been a major challenge. Almost all economies in South Asia have been recipients of development aid for the last 50 years or so. The quantum varied over the years but has consistently gone up in almost all cases except for India, where it had declined in the recent past with India turning selective in accepting aid. India's Development Cooperation Policy underwent a major change in early 2000s. A minimum ceiling of US\$ 25 million was set for incoming foreign aid to India. Only G-7 countries are left to provide aid. In 2016, India declined aid from UK too (Table 1). Countries in South Asia, however, differ greatly in terms of domestic resource mobilisation capacities. This is evident from the variety in terms of their dependence on ODA (Table 2).

Challenges to Domestic Resource Mobilisation

With paucity of funds for appropriate investments to enhance production capacities and capabilities that also include technology and human capital, economies

of the South have failed to achieve their targets of industrialisation and development. Adequate capital and savings are important for expansion of productive capacities that is linked with expanding livelihood opportunities. This further leads to expansion of local markets and incentivises local production. Entrepreneurships in the small and medium industries segment may thrive with improvement in the economic opportunities of people in the developing countries. Developing countries still lack well developed financial markets and instruments to make private investments viable. Hence, domestic resource mobilisation emerges as a key challenge in developing countries, which necessarily impacts their development goals. Appropriate fiscal policies, therefore, become extremely important for facilitating revenue generation for financing capacity creation and development.

Developing countries continue to have very low tax to GDP ratios (avg. 12.5 percent). This ratio further falls when oil related revenues are considered separately. There is widespread black money in developing countries generated not only through money laundering but also through over-invoicing and under-invoicing rampant in business transactions. India has been at a disadvantageous position with respect to containing black money. However, there are more complex issues that seriously handicap the domestic resource mobilisation capabilities of developing countries. These are: profit shifting practices of multinationals and inability to tax capital gains.

Therefore, the threefold challenge to domestic resource mobilisation in developing countries is:

- Illicit financial flows (black money generated through money laundering, and adverse practices in financial transactions e.g. over/under invoicing)
- Transfer pricing practices of multinational businesses
- Inability to tax capital gains with cross border asset ownership

While under the FfD3 process proactive efforts have been made to address the issues of domestic resource mobilisation in poor countries and strengthen their domestic revenue generation capacities to check illicit flows³, the global community has been oblivious of the vast amount of resources that are leaking out of the developing countries in the form of tax evasion under profit shifting practices. It has sometimes been elaborated as manifestation of 21st century colonialism

Table 1: Aid Inflow in South Asia (US\$ Million, constant 2012 prices)

Country	Year	1990	1995	2000	2005	2010	2013
Afghanistan	Net ODA	192.16	294.45	234.98	3314.53	6684.83	5369.93
	Per cent of Net Loan in Net ODA				4.16	-0.12	0.19
	Per cent of Loan Repayments in Net ODA	9.86	0.03		0.13	0.01	0.32
Bangladesh	Net ODA	3364.49	1688.93	1785.62	1553.71	1474.38	2722.26
	Per cent of Net Loan in Net ODA	51.18	23.61	32.57	34.89	8.26	42.18
	Per cent of Loan Repayments in Net ODA	5.74	23.97	36.60	34.16	48.84	29.84
Bhutan	Net ODA	75.55	88.53	87.37	110.3	137.94	138.37
	Per cent of Net Loan in Net ODA	13.32	7.76	18.95	20.88	32.80	20.58
	Per cent of Loan Repayments in Net ODA	1.84	0.81	4.45	2.83	5.65	5.93
India	Net ODA	2227.66	2120.42	1966.23	2165.77	2946.68	2546.74
	Per cent of Net Loan in Net ODA	38.67	36.71	41.87	24.79	54.63	46.70
	Per cent of Loan Repayments in Net ODA	52.00	54.45	77.35	85.37	67.00	90.11
Maldives	Net ODA	33.21	73.3	29.15	94.09	116.18	23.42
	Per cent of Net Loan in Net ODA	19.30	43.10	8.10	20.60	57.23	4.87
	Per cent of Loan Repayments in Net ODA	12.07	5.80	16.47	6.82	8.93	46.75
Nepal	Net ODA	670.86	534.4	579.37	508.3	860.7	871.24
	Per cent of Net Loan in Net ODA	41.62	28.83	34.01	-4.19	2.14	5.83
	Per cent of Loan Repayments in Net ODA	2.90	9.98	14.11	16.51	16.39	19.23
Pakistan	Net ODA	1785.96	1007.01	977.03	1951.13	3144.45	2187.68
	Per cent of Net Loan in Net ODA	42.25	52.39	66.67	33.72	1.53	2.23
	Per cent of Loan Repayments in Net ODA	26.86	78.43	46.34	26.64	25.43	35.72
Sri Lanka	Net ODA	1163.46	662.47	385.53	1445.09	615.92	442.58
	Per cent of Net Loan in Net ODA	54.60	45.02	26.34	36.31	30.71	23.20
	Per cent of Loan Repayments in Net ODA	10.20	30.96	95.56	9.38	82.82	121.36

Note: Net ODA includes grants, capital subscriptions and net loans (loans extended minus repayments of loan principal and offsetting entries for debt relief). Percentage of Net Loan in Net ODA is calculated by the authors.

Source: RIS based on OECD database.

when resources are sucked out of the developing countries in the absence of prudent international taxation norms. The amount of development assistance flowing into the global South is much less than the quantum of profit shifting from developing and poor countries. This necessitates that countries of the South must get a share of the resources generated within their jurisdiction.

India has been foremost in highlighting the scale of revenue loss in developing countries on account of profit shifting practices of multinationals (transfer pricing) and inability to adequately tax capital gains under existing global norms. These are over and above all forms of illicit financial flows that keep substantial revenues out of the reach of the developing countries. UNCTAD's simulation indicates that the amount of corporate profits shifted from developing economies

Table 2: Net ODA as Percentage of Central Government Expenditure

	2008	2009	2010	2011	2012
Afghanistan	95.08	113.30	79.68	65.22	79.92
Bangladesh	23.97	12.12	13.25	11.77	..
Bhutan	30.48	42.57
India	1.03	1.11	1.01	1.23	0.56
Maldives	9.33	4.85	16.82	7.21	..
Nepal	32.73	29.52	25.15
Pakistan	5.08	10.19	9.72	9.32	4.79
Sri Lanka	9.35	7.97	6.07	5.76	4.59

Source: WDI (2014).

is about US\$ 450 billion – implying, at a weighted average effective tax rate across developing countries at 20 per cent, annual tax revenue losses of some US\$ 90 billion (World Investment Report, 2015). Other

relevant studies, focussing on the revenue losses for developing economies generated by corporate trade mispricing schemes, such as Christian Aid (2008) calculate such losses between US\$ 120 billion and US\$ 160 billion a year. Recovering some or all of these losses could significantly contribute to domestic resource mobilisation in developing countries.

Global Tax Issues

The FfD3 deliberation was significant in terms of articulating the need for a new global institution of norm setting on tax. Negotiations on all prevailing international tax norms involve a few countries of the Paris Club/OECD. The financing for development (FfD) is a process that has been pursued under the UN framework outside Washington after the Asian Financial Crisis. This gives a platform that governance ideas may emerge out of the UN system and recommendations are provided for institutions like the IMF as well as on substantive norm setting for ODA. Hence, the FfD process is sufficiently empowered to initiate a blueprint for new international tax architecture.

The Group of 77 and China has repeatedly called for the upgrade of the Committee of Experts on International Cooperation in Tax Matters, transforming it from experts acting in their own capacity, to an inter-governmental subsidiary body of the Economic and Social Council (ECOSOC), with experts representing their respective governments. This would go a long way in not only strengthening international cooperation in tax matters, but it would allow all member States, including developing countries, to have an equal say on issues related to tax as well. Not only did India engage proactively and productively in the negotiations on the Post 2015 Development Agenda and framing of the Sustainable Development Goals since 2012, India made effective contributions towards the final outcome in Addis Ababa, before the adoption of the Addis Ababa Action Agenda. While, the draft outcome of the FfD3 was largely sealed, India sought to make substantive changes under domestic resource mobilisation and international tax architecture.

The issue of increasing efforts to reduce illicit financial flows by 2030 and combating tax evasion through national regulations and international cooperation remained the cornerstone of the FfD3

negotiations. While the FfD3 agenda was promising in terms of international support for improving domestic revenue generation capabilities of poor countries, India with support from G77 and China proposed stronger international tax rules and advocated an intergovernmental tax body. This was proposed with the objective of creating an institution under the UN with larger participation of the developing world reflecting rising aspirations and capabilities of the South. The Addis Ababa Action Agenda calls for international cooperation to combat tax evasion and corruption to reduce opportunities for tax avoidance. This also includes steps towards inserting anti-abuse clauses in all tax treaties. On multinationals, it suggests “we will make sure that all companies, including multinationals, pay taxes to the Governments of countries where economic activity occurs and value is created, in accordance with national and international laws and policies”. However, the agenda failed to endorse the demand of India and other Southern countries for a global tax body.

It is achievement for India however hailed as significant in diplomatic circles to introduce new modalities in the constitution of the UN promoted international tax committee (Committee of Experts on International Cooperation in Tax Matters under the ECOSOC of the UN). The members of the committee shall henceforth be nominated by national governments and would have wider participation of developing countries. This deviates from the usual UN practice of nominations by the Secretary General. The frequency of meetings of this committee has been increased to two from one per year, a reflection of India’s negotiating stance.

As a result of it the 11th session of the UN Committee of Experts on International Cooperation in Tax Matters in October 2015 addressed a number of critical issues. Major takeaways for the developing countries from this session were aplenty. Firstly, an adoption of a new article on the taxation of fees for technical services has been included for the next UN Model Double Taxation Convention between Developed and Developing countries (UN Model). Also a new practical Manual for the Negotiation of Bilateral Tax Treaties between Developed and Developing Countries has been adopted.⁴ Secondly, in a major fillip to the countries dependent on commodity

exports (minerals), a subcommittee on Extractive Industries Taxation Issues for Developing Countries presented its work on tax treaty issues and indirect sales of extractive interests. The subcommittee has been entrusted to produce practical guidelines for developing countries, including on the tax treatment of decommissioning, VAT and re-negotiation of contracts.

Thirdly, the subcommittee on Exchange of Information presented a draft “Code of Conduct” to provide guidance for countries to cooperate in combating international tax evasion through enhanced transparency and exchange of information. It garnered tremendous amount of interested and suggestions to improve the draft shall be incorporated by the October session of the Committee in 2016. Lastly, United Nations Department of Economic and Social Affairs’s (UNDESA) work in the area of capacity building, including the production of a “Handbook on Selected Issues in Protecting the Tax Base for Developing Countries” and the rich programme of training workshops and other activities with the participation of developing countries, in collaboration with international and regional organisations were appreciated by this Committee.

STI and SDGs: Technology Facilitation Mechanism (TFM)

The role of Science, Technology and Innovation (STI) in achieving the sustainable development goals (SDGs) as laid out by the Post-2015 Development Agenda has been recognised by the UN. International Council for Science (ICSU) has pointed out “The SDG framework poses a number of conceptual as well as implementation challenges that will require enhancing the close collaboration between the policy and scientific communities and other stakeholders”. The Agenda 21 that emanated from the Earth Summit (1992), in its chapters 34 and 35 stressed on “Transfer of environmentally sound technology, cooperation and capacity-building” and “Science for sustainable development”, respectively. S&T, knowledge sharing and capacity building featured prominently in the Rio+20 declaration and subsequent negotiations on the Post-2015 Development Agenda.

One of the key challenges in linking S&T and SDGs is how to facilitate technology transfer and build capacity in developing countries and LDCs

in making use of S&T to achieve SDGs. There are barriers like IP rights and lack of capacity to absorb technology. It has been pointed out that the SDGs may not be achieved in most developing countries without a sustained industrialisation process. This could only be possible if transfer of competitive technologies to those countries take place. Moreover, while the industrialised countries should bear greater responsibility of environmental mitigation, sustainable industrialisation in the developing world would depend on easier access to green technologies. And finally, the impacts of emerging technologies on developing countries and LDCs and how they can use them to achieve their developmental needs and meet the objectives of SDGs need to be explored. Although many of the issues like technology transfer, capacity building and linking S&T policies with developmental goals have been discussed before, in the context of SDGs there is a need to examine past experiences, explore the role of emerging technologies and identify new approaches that will facilitate better use of S&T and Innovation in achieving SDGs.

India (along with Brazil) has been enthusiastically promoting the cause for a Technology Facilitation Mechanism (TFM) under the Post 2015 Development Agenda. The Group of 77 and China long held an unambiguous position on the establishment of a TFM which it considers as one of the most transformative means to implement sustainable development. India through its submissions has highlighted that, immediate and urgent delivery of technology development, deployment, dissemination and transfer to developing countries require suitable responses, including a continued emphasis by all countries on the enhancement of enabling environments, facilitating access to technology, and financing that leverages private sector financial resources. Current institutional arrangements are insufficient to deliver immediate and urgent technology development, deployment, dissemination, and transfer to developing countries.

India has achieved a fair amount of success in persuading the global community on the necessity of a TFM towards fulfilling the forthcoming development agenda across the developing world. The Addis Ababa Action Agenda documents final decision on part of world leaders to establish a technology facilitation mechanism. The broad agreement on

an institutional mechanism of technology transfer suggests important achievement by developing countries to keep technology issues as a central element in the 2030 Agenda. In the aftermath of the adoption of the new development agenda at the UN Sustainable Development Summit in September 2015, the UN would take the lead in designing appropriate institutional mechanism to formalise the TFM. However, it has to be borne in mind that there are no concrete commitments in the 2030 Agenda regarding technology transfer and its financing. Cooperation among emerging economies through platforms like the BRICS and IBSA to influence international institutional architecture on trade and technology to create an enabling environment for the feasibility of the TFM would be important.

The proposed TFM will be based on a multi-stakeholder collaboration between Member States, civil society, the private sector, the scientific community, agencies of the UN and other stakeholders (Box 1). The composition would include a United Nations inter-agency task team on science, technology and innovation for the sustainable development goals, a collaborative multi-stakeholder forum on science, technology and innovation for the sustainable development goals and an online platform. The

proposed online open platform is expected to provide a comprehensive index of existing technologies and tools that would enable implementing the SDGs and a coordinated STI capacity building programme. The global platform will map existing technology facilitation mechanisms, needs and gaps, including in areas vital for sustainable development, including environment, agriculture, cities and health.

On the implementation of the TFM, Target 17.6 of the SDGs suggests “Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.” For example, the Asian and Pacific Centre for Transfer of Technology (APCTT), headquartered in New Delhi, has been an effective institutional mechanism for regional technology transfer and capacity building since its inception in 1977. APCTT is a regional institution of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) serving in the Asia-Pacific region. The proposed TFM can implement

Box 1: TFM – Proposed Institutional Architecture

The proposal for the institutional architecture is taking shape primarily through inputs from various UN Agencies and other inter-governmental/multilateral institutions like UNDESA, UNEP, UNCTAD, UNIDO, ITU, WIPO, World Bank, and UNESCO. The proposed TFM will be based on a multi-stakeholder collaboration (STI Forum) between Member States, civil society, the private sector, the scientific community, agencies of the UN and other stakeholders. The composition would include a UN Inter-Agency Task Team (IATT) (29 UN entities as of now) on science, technology and innovation for the sustainable development goals, a collaborative multi-stakeholder forum on science, technology and innovation for the SDGs and an online platform. The proposed online open platform is expected to provide a comprehensive index of existing technologies and tools that would enable implementing the SDGs and a coordinated STI capacity building programme. The global platform will map existing technology facilitation mechanisms, needs and gaps, including in areas vital for sustainable development, including environment, agriculture, cities and health.

Since its establishment, the IATT has met three times. It adopted its Terms of Reference and decided to meet monthly. It is currently co-chaired by UNDESA and UNEP. Chairmanship of the IATT will rotate every two years among members. The IATT is working with 10 eminent representatives from civil society, the private sector and the scientific community to support the implementation of the TFM and in particular to prepare the STI Forum. The Inter-Agency Task Team is working on a concept note for the STI Forum. With regard to other tracks of work, the UN team has prepared an initial mapping of UN technology facilitation initiatives, which assessed more than 70 STI-related initiatives. The Task Team is also engaged in an ongoing reflection on system-wide capacity building efforts on science, technology and innovation. The IATT is also working to identify potential sources of funding, and to devise a strategy for mobilising resources to support the work of the Technology Facilitation Mechanism.

Source: UN.

coordination among regional mechanisms to take on global challenges minimising duplication of efforts and strategies. Box 2 gives a snapshot of mechanisms on technology transfer in APCTT activities.

The proposed framework and modalities of the TFM as yet, can best be described as nascent. It is felt that TFM might fail to attract the interest of major

technology owners, such as transnational corporations. Nevertheless, it may provide an opportunity to enhance South-South Cooperation as well as to expand the exchange of technologies developed by SMEs. As already highlighted the TFM is accounting for all STI related initiatives under the UN processes and TFM is meant to encourage North-South, South-South and Triangular cooperation. India strongly advocates

Box 2: Technology Transfer Support Services under APCTT

APCTT promotes technology transfer in the Asia-Pacific region through its ICT-based networks and platforms and its advisory services. Emphasis is placed on facilitating cross-border business cooperation among small and medium scale enterprises (SMEs) and promoting technology based business partnerships.

Online Technology Transfer Support Mechanisms

- Asia-Pacific Technology Transfer Market Service for SMEs
 - The Technology4SME Database serves as an online platform for information exchange on the availability and sourcing of technologies for small and medium enterprises in countries in the Asia Pacific region.
 - The Technology4SME Database provides information on the technologies available for transfer (technology offers), technologies needed (technology requests) as well as the opportunities for business cooperation (Joint venture and Partnerships).
 - The use of Technology4SME database is free of cost.
- Global Technology Databases
 - APCTT has compiled a list of global as well as country-wise technology databases that deal with the technology transfer related services for SMEs and entrepreneurs.
 - If a particular technology search has been made using APCTT's Technology4SME database and if the search did not yield desired results, the users could use this section to extend their search to other databases listed in this section.
 - Over 15 technology databases could be readily accessed through this service of APCTT. More technology databases from countries across the globe will be added periodically for the benefit of SMEs and entrepreneurs.
- Renewable Energy Technology Bank (RET-Bank)

The primary objective of the Renewable Energy Cooperation-Network for the Asia Pacific (RECAP) established by APCTT is to facilitate technology transfer cooperation among countries in the Asia-Pacific region in the area of renewable energy. Towards this end, APCTT has developed a “Renewable Energy Technology Bank (RET-Bank)” of tested and proven renewable energy technologies (RETs) initially in the areas of solar, biomass, wind, mini-hydro power and geo-thermal energy. APCTT has developed this Renewable Energy Technology Bank as on-line technology database freely available for public access through its RECAP website.

Technology Transfer Facilitation Services

APCTT offers technology transfer facilitation services to technology providers and seekers, especially by partnering with its national focal points and technology transfer intermediary networks. Some important technology transfer facilitation services of APCTT include:

- Providing information on technology transfer, joint-venture, business/research partnerships and opportunities.
- Organising business-to-business meets, technology exhibitions and technology transfer related conferences and technology dissemination workshops in partnership with APCTT focal points in the member countries.
- Providing support services to help techno-entrepreneurs interact with technology transfer intermediaries, source technology globally, and also explore venture capital financing.

Source: APCTT.

Box 3: South-South Cooperation to Boost Climate Resilience

A thematic dialogue convened by the Technology Executive Committee (TEC) of the UN Climate Convention in April 2016 will highlight policies that can contribute to successful South-South Cooperation on adaptation technologies. The event aims to support countries to become more resilient to the inevitable impacts of climate change through the use of technologies such as seawalls, drought-resistant crops, land management techniques, disaster-risk management and rain-water harvesting.

The TEC is holding the thematic dialogue as part of its 12th meeting, at which it will develop a new workplan and consider issues such as: technology needs assessments; climate technology financing; enabling environments and barriers; and mitigation and adaptation technologies. The two bodies of the UNFCCC's Technology Mechanism work together to enhance climate technology development and transfer. The TEC addresses technology issues and identifies policies that countries may use to enhance climate technology development and transfer. The Climate Technology Centre and Network (CTCN) is currently responding to developing country requests to enhance technology action on the ground.

Source: UNFCCC TEC Expert Meeting, April 2016.

South-South Cooperation and climate change by all means remains an important area for international technological cooperation. The evolving framework and principles of South-South Cooperation should be leveraged in that direction. Recent efforts under the UN Framework Convention for Climate Change (UNFCCC) after Paris COP 21 support South-South Cooperation in technology to address issues of climate change (Box 3).

However, assessing the quality and effectiveness of technologies eventually offered through the TFM is an important operational challenge to be faced. Building upon the initiatives within the UN, there is further scope towards identifying measures for implementation of the TFM and how India can contribute in that process and benefit from the evolving framework. In that respect, key strategies on national technology assessment have to be designed and implemented. It would also be important to have reformed institutions and approaches around issues like IP ownership and technology commercialisation so that appropriate balance between inventor's right and social obligation towards making knowledge available and accessible is achieved. Finally, institutionalising robust evaluation and reporting mechanism would add to the effectiveness of the new mechanism that relies both on national efforts as well as on international cooperation.

Implementation of the SDGs in India

The key to the success of the SDGs is often highlighted in terms of maximum decentralisation for policy

planning and implementation. This could be the only viable route for a country of India's size and proportions. India has always supported decentralisation and empowerment of grassroots institutions. State governments have a preeminent role in implementing development projects undertaken by the centre as well as the states themselves. At this juncture, there is need to sensitise individual states on the forthcoming global development agenda and its implications for India. They should be legitimate partners in drawing up the most appropriate implementation roadmap.

While overall economic policy direction is framed at the union level and national programmes on development are designed at the centre, states implement significant social sector infrastructure development projects and design policies to some extent on resource mobilisation. Increasingly, more powers in these areas are being transferred to the states in order to expedite programme implementation and ensure greater grassroots participation.

The Planning Commission which has been an important institution post Independence and functioned as a Central Ministry was mainly in charge of annual disbursement of central funds to the states and determined the state specific shares. Needless to mention, this mechanism was heavily centralised with disproportionate say of government at the centre. The five year plans formulated by the planning commission continued to direct the central departments in terms of the objectives and expenditures. Over the recent decades, as the government withdrew from

industrial production in a large number of sectors and liberalised industrial licensing policies, the role of the Commission was more concentrated in setting five year plan objectives for overall economic growth on one hand and social sector development on the other. In doing so, the Commission had developed a practice of evaluation of the progress made under ongoing five year plans in areas of economic performance, social sector development, industry, energy management, environment and sustainability. The Planning Commission, though with a lag, had absorbed some of the MDG targets in the process of national planning. This was more prominent during the 10th five year plan. Other central departments were also encouraged to do so. Monitoring of MDG targets was accomplished in some sectors.

The new NDA government chose to bring in significant reform in the institution and replaced the Planning Commission with National Institution for Transforming India (NITI Aayog) do to away with rigid and centralised policy planning. The vision of the new government is cooperative federalism where it aspires to partner states in key policies spanning economy and social sector development. While the older institution was effective in terms of broad policy planning, the new body is conceptualised as a think tank with much more focussed attention on policy dialogues and formulation at multiple tiers. Fortuitous as it may seem, the new institutional reform came in the same year when India along with the world has adopted the SDGs. This global framework sets targets for national governments, however, with significant policy space at the national level to attune national policies according to domestic priorities. The global framework would nonetheless be useful in strengthening policy coherence among various sectors as enshrined in the cross domain approach of the SDGs.

NITI Aayog may be rightly placed not only to initiate major policy planning in the fulfilment of the SDGs, but would also be able to coordinate policies with a broad spectrum of government departments. It may play a crucial role in explaining the goals and the targets and their interlinkages to the wider policymaking infrastructure within the government. At the next level it should define the policy space for the states in this regard and ensure maximum participation

of the states in policy formulation at both levels. This would entail proper direction on institutional mechanisms for anchoring the SDGs at the state level for their effective implementation.

It would be important to note that India as an emerging economy has mature governance institutions to ascertain the future needs and develop policies accordingly. It has often been highlighted that ongoing programmes run by the government are comprehensive towards achieving multiple dimensions of social and economic progress. These are large scale in terms of resources and reach and have been intelligently designed towards effective delivery through appropriate use of technology. India has made significant progress in terms of creating comprehensive digital and biometric registry of its citizens and has taken steps towards minimising exclusions in service delivery. Programmes focussed on financial inclusion, real time and meaningful digital connectivity through leveraging ICT and skill development are projected as key enablers of development and empowerment. On sustainability India has already initiated key programmes on energy efficiency and renewable energy with even higher ambitions compared to that of the SDGs in terms of shorter deadlines. Such efforts have prompted India to enthusiastically accept the SDGs. Aligning government programmes to include targets enshrined in the SDGs would make their evaluation and monitoring effective. This should also encourage policymakers to appreciate and define the scope of these policies towards attaining cross sectoral objectives in the spirit of the SDGs.

However, India continues to score low on the social development indicators and have numerous pockets of backwardness. Research has indicated that backwardness measured in terms of non-income indicators such as hunger, infant mortality and literacy may not be exclusive to poorer states. At the same time states with lower poverty head count ratio continue to have backward districts (Bakshi *et al.*, 2015). Moreover, the Indian trajectory of economic growth has led to rising inequalities in the absence of adequate expansion of employment opportunities. The model of economic growth adopted by India may not be very different from those followed by early industrialised countries and hence the question of sustainability is

paramount with rising prosperity. The SDGs form a reference point in this regard and would remind the state of its global commitment to ensure progress on all counts of sustainable development. However, it would be wrong to perceive that SDGs are only meant to define the domestic policy space. It is also an agenda for means of implementation at the global level and has enormous bearing on international institutions governing economy, environment and technology. Effective coordination between concerned departments of the government so that India presents a coherent perspective with robust and concrete policy recommendations for institutional reforms would go a long way in strengthening India's position at global negotiating platforms. Again, participation of states on such matters of foreign policy would only make the process more informed and inclusive.

Concluding Remarks

In this paper we have elaborated the context in which India might position itself with regard to the SDGs on global governance issues as well as domestic implementation. One important approach that caters to both is South-South Cooperation. Collaboration among Southern countries not only strengthens the southern narrative on development and sustainability at Global forums but also effectively complements national strategies through sharing of best practices, sustainable use of resources available regionally and partnering in development projects catering to common challenges. South-South Cooperation encourages partners to have a responsibility for self-development in a mutually beneficial relationship by strengthening autonomous capacity for goal setting, decision making and national implementation. Strengthened regional cooperation can play an important role in mobilising financial resources for sustainable development. Among others, effective regional arrangements can provide financing for regional public goods, facilitate trade flows and attract investment into key sectors such as infrastructure.

Attaining SDGs in India would also strengthen cooperation with the immediate neighbourhood, i.e. South Asia for sustainable use of natural resources for economic progress through conducive regimes

of regional trade and economic development. Such cooperation would not only be effective for resource mobilisation and project development but would be important for designing common indicator framework on regional development outcomes aligned with the SDG targets. India's development cooperation in South Asia may be leveraged to achieve confidence among regional partners on benefits of such common approaches to common challenges. The SDGs with its life of 15 years offer opportunities for speedy transformation. India along with South Asia cannot afford to miss this opportunity.

Endnotes

- ¹ Apart from development finance the other critical area is climate finance. The first calls for institutional mediation to ensure equitable economic progress globally and social welfare, the latter remains contentious on grounds of common but differentiated responsibilities. In the recently concluded COP21 in Paris, even as the countries could ensure commitments on reduction of green house gases contributed by both the developed and developing worlds, developed countries resisted greater commitments on their part towards resources on climate mitigation globally.
- ² Low- and lower-middle-income countries may need to increase public and private expenditure by some US\$ 1.3 trillion per year (US\$ 342 – 355 billion for LICs and US\$ 903 – 938 billion for LMICs) in order to reach the SDGs. This corresponds to 4 per cent of these countries' estimated GDP over the period measured in purchasing power parity (PPP) and 11 per cent of GDP in international dollars, or 0.7 – 1.1 per cent of world GDP. At the global level an incremental 1.3 – 2.0 per cent of world GDP may be required to finance the achievement of the SDGs in all countries. Domestic resource mobilisation in developing countries can increase significantly through international support to improve domestic capacity for tax and other revenue collection leaving a financing gap of US\$ 133 – 161 billion per year or 0.23 per cent of high-income countries' GDP. (<http://unsdsn.org/resources/publications/sdg-investment-needs/>)
- ³ In a recent report by the Global Financial Integrity group funded by the Government of Finland, it is suggested that between 2004 to 2013 the developing world as whole lost US\$ 7.8 trillion and in real terms these flows increased at 6.5 per cent per annum. See Kar and Spanjers (2015).
- ⁴ Members of the Committee also decided to establish two new subcommittees: (1) Subcommittee on Royalties, with the mandate to propose an update of Article 12 of the UN Model and its Commentary, particularly on the tax treatment of industrial, commercial and scientific equipment and software-related payments; and (2) Subcommittee on Mutual Agreement Procedures – Dispute Avoidance and Resolution, to study the topic, provide guidance and propose any necessary updates to the UN Model in that respect.

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Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development : Targets and Indicators	
Finance	
17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection	17.1.1 Total government revenue as a proportion of GDP, by source
	17.1.2 Proportion of domestic budget funded by domestic taxes
17.2 Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance (ODA/GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries	17.2.1 Net official development assistance, total and to least developed countries, as a proportion of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee donors' gross national income (GNI)
17.3 Mobilize additional financial resources for developing countries from multiple sources	17.3.1 Foreign direct investments (FDI), official development assistance and South-South Cooperation as a proportion of total domestic budget
	17.3.2 Volume of remittances (in United States dollars) as a proportion of total GDP
17.4 Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress	17.4.1 Debt service as a proportion of exports of goods and services
17.5 Adopt and implement investment promotion regimes for least developed countries	17.5.1 Number of countries that adopt and implement investment promotion regimes for least developed countries
Technology	
17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism	17.6.1 Number of science and/or technology cooperation agreements and programmes between countries, by type of cooperation
	17.6.2 Fixed Internet broadband subscriptions per 100 inhabitants, by speed

17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed	17.7.1 Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies
17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology	17.8.1 Proportion of individuals using the Internet
Capacity-building	
17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation	17.9.1 Dollar value of financial and technical assistance (including through North-South, South-South and triangular cooperation) committed to developing countries
Trade	
17.10 Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda	17.10.1 Worldwide weighted tariff-average
17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020	17.11.1 Developing countries' and least developed countries' share of global exports
17.12 Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access	17.12.1 Average tariffs faced by developing countries, least developed countries and small island developing States
Systemic issues	
<i>Policy and institutional coherence</i>	

17.13 Enhance global macroeconomic stability, including through policy coordination and policy coherence	17.13.1 Macroeconomic Dashboard
17.14 Enhance policy coherence for sustainable development	17.14.1 Number of countries with mechanisms in place to enhance policy coherence of sustainable development
17.15 Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development	17.15.1 Extent of use of country-owned results frameworks and planning tools by providers of development cooperation
<i>Multi-stakeholder partnerships</i>	
17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries	17.16.1 Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals
17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	17.17.1 Amount of United States dollars committed to public-private and civil society partnerships
<i>Data, monitoring and accountability</i>	
17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts	17.18.1 Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics
	17.18.2 Number of countries that have national statistical legislation that complies with the Fundamental Principles of Official Statistics
	17.18.2 Number of countries with a national statistical plan that is fully funded and under implementation, by source of funding
17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries	17.19.1 Dollar value of all resources made available to strengthen statistical capacity in developing countries
	17.19.2 Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100 per cent birth registration and 80 per cent death registration