

# Global Public Policy: Networks & Role of Spatial Analysis

Paper Submission: 20 /04/2020, Date of Acceptance: 23/04/2020 , Date of Publication: 28/04/2020



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### Abstract

In the increasingly "glocal" world, most of the problems faced by the hitherto highly connected world are global in nature, even if the genesis of the problem is local. This necessarily entails formulation of Global Public Policy having requisite international participants and implementation of the same through the transnational planning framework. The formulation of Global Public Policy and implementation through various approaches of Planning is achieved through development of Global Networks, which forms the medium between the participants, stakeholders as well as the subject of the policy and planning.

Even though spatial analysis is central to the Network studies, and Network studies have been integral to Policy and Planning processes, the implicit role of spatial analysis, has not been given due credence in Policy Paradigm. Consequently, the same highlights the near absence of masters of spatial analysis i.e. Geographers under the Public Policy and Planning domain.

The typology of networks employed under the broader Global Public Policy paradigm highlights that spatial analysis is inherently employed to address the requisite issues and achieve the objectives. In fact, the causality and consequence of the Policy-Planning process are best studied and evaluated using spatial analysis. The spatiality used by public-private network-mesh under the categories of Trans-Governmental Networks, Transnational Advocacy Networks, Transnational Private Regulations, Transnational Public-Private Partnership and Knowledge Networks highlights the spatial basis of Global Public Policy. The numerous works of the researchers highlights even though spatiality has been pivotal in their respective research on global and regional dimensions of pressing socio-economic-political problems, the same has not been acknowledged as central for addressing the pressing issues.

It is high time that the spatial-analysts i.e. Geographers may be made an integral part of the Global Public Policy process so that Policy-Planning domain can achieve the desired objectives.

**Keywords:** Global Policy and Planning, Spatial Analysis, Network Theory, Transnational Networks.

### Introduction

Whether Climate Change, a pandemic outbreak or migration of population, the problems and issues facing the Planet are truly global in nature and character. It would be rather impossible for a particular political entity to even formulate the policy of addressing the issue, let alone contain the same through planning. As Mehta (2019), while addressing the issue of International Migration, prescribes that Migration today is a global issue, and hence needs global solutions, the issues of global nature and character require formulation of a Public Policy on a transnational scale.

Thus the concept of Global Public Policy and Planning, However, the framework of Global Policy necessary entails the employment of Spatial Studies, and hence requires the help of Geography. Geography, the science of Spatial analysis, though one of the oldest disciplines of the World, *per se*, has not got the attention in the Public Policy domain. Although the Geography or spatial analysis has integrally been used in policy-planning matrix, disappointingly, the impact of geographers on the policy realm has been limited. Increasingly, it seems, rather odd that other social, political, environmental or financial scientists, and even media managers, shape the public perception and policy-planning scenarios in the areas where geographers and spatial analysts could – and indeed

should – be having much greater influence (Martin, 2001). Though there were sporadic studies and conferences addressing the same, they are highly inadequate. Johnston & Plummer (2005) identified the nine stages of policy formulation and identified the role of geographers at each and every level, so that work of Geography and spatial analysis can be utilized in policy paradigm and vice versa.

Space & Place, the domain expertise of geographers, acquires pivotal importance in the area of Policy and Planning. Though there are conceptual differences, particularly for geographers and cartographers, between the term- place and space, it may not be proper to dwell on the nuances at this point. Place or Space, is not just an Euclidian concept of measurement of land. At the outset, the concept of place seems to be a straightforward idea, however, due to the presence of multitude of complexities and difficulties associated with the concept of place, the more advanced idea of “sense of place” has been given subscription. This is because place resists simple definition or standardization, and is increasingly affected by a whole range of local, global, cultural and other influences. Place-making and Place-organization is the stated aim of much policy activity. Hence, Geography is both cause and effect of policy and planning. The Genius loci concept (Crang, 1998) and Sense of Place (Agnew 1987), essentially a spatial concepts have been employed in policy and planning.

However, it's the connections between actors and processes, enshrined under Policy Networks that provides the necessary continuum between policy and spatial analysis. The spatial analysis forms core of Global policy networks and hence integral to Global Policy itself.

#### **Objectives of the study**

The study aims to establish the centrality of spatial analysis, through Network typology, in Global Policy-Planning paradigm and the need for recognising that centrality for achieving the optimum outcomes.

The study commences with the academic discussion on the emerging trends in Global Public Policy, involving multitude of factors. Subsequently, the importance of Networks, as sets of relations and connections is highlighted. It is emphasised that networks provide a functional cross-regional and cross-boundary interconnections as recognized in Global Policy. The study presents the work of researchers, which highlights the importance of spatial dimensions in Network studies. Since spatial dimensions provides the terra firma for functioning of Networks, the Networks act as a necessary construct between Spatiality and Global Policy.

The most active network typologies under Global Public Policy are explained vis a vis inherent spatial analysis involved in each and every network type. The study aims to establish that absence of due recognition to spatial analysis in public-policy domain and hence the absence of geographers in Planning process may be one of the cause that Policy-planning paradigm is not able to achieve its desired objectives.

#### **Global Public Policy**

Global Public policy is a subset of the broad range of discipline of Public Policy, although researchers and analysts prefer to call Global Public Policy as simply Global Policy, as the word “Public” tends to be associated more with the notion of sovereign government. Accordingly, going by the inherent meaning of the Westphalian grammar, the Global Public Policy may dwell on the stream of Global government, which may not be acceptable to many sovereign governments, particularly to the right-leaning, as it may appear to impinge, even if notionally, on the sovereign power of the government. Nevertheless, to date, however, many policy scholars have used the term ‘global policy’ without defining it (True, 2003).

The theoretical constructs in the contemporary times has been methodologically elaborated by Stone (2020). ‘Global public policy’ has been called ‘governing without government’ (Reinicke, 1998). Another view considers that ‘a policy is “global” to the extent that policy actors operating in a global or transnational space are involved in policy development, transfer, and implementation’ (Orenstein, 2005). Most generally, Global Public Policy-planning paradigm is set of complex supplementary-complementary deliberations among the regional, national and international participants for establishing policy formulations and planning strategies to address the global transnational issues.

The concept of Transnational Administration is also important in this regard. As pointed by Stone and Ladi (2015), Transnational Administration refers to the formulation, management, implementation of global policy and planning paradigm by both private and public sector players, beyond the boundaries of the sovereign state but often in the areas beneath the global level.

Stone (2020) identified that Global policy as the intersection of the three competing factors, viz.

1. First, as Cerny (2017) highlighted that the decision-making under the domain of Global planning is polycentric rather than state-centric. Various participants are involved in the formulation and implementation of global policy-planning domain. Accordingly, there is more often reference to ‘global policy networks’ as manifestations of global policy-planning domain. (Orenstein, 2005).
2. Second, unlike realms of national policy making where new laws and regulations apply universally, the implementation of global policies is not necessarily global. While the policies are formulated with global dimensions, the ensuing planning and policy implementation differs from nation to nation, region to region. Policy applications can be geographically specific and limited to a few countries. The same may also be formulated at a more regional level, through trans-regionalism processes as elucidated by Hoffmann (2019). This differential pattern often results from policy diffusion processes which can occur between just a few countries (Orenstein, 2005).

3. Third, like sovereign policy making, there is a blurring of respective boundaries regarding the domain of respective organization, which is responsible for addressing the given issue. At a sovereign level, political executive holds the preponderance of power, no such concentration of power exist at the global level. In such circumstances, global policy making becomes more nuance and protracted as competing domains of several authorities "jostle" for space.

The Global Public Policy has been increasingly identified with the doctrine of Global public goods, even though the current literature may be shying away from explicitly mentioning the same. World Bank defines global public goods (World Bank, 2019) as both nonrival and nonexcludable and thus only those goods which cover issues that prove transborder and international in nature, including (1) the biotic and abiotic environment, (2) the prevention of communicable diseases, (3) international trade, (4) international financial architecture, and (5) global knowledge for development. Due to the non-rivalrous nature of GPGs, in a world of sovereign nations, no single nation can capture fully the benefit of its own spending on a 'global' good (Kaul, 2019). In the absence of a 'global sovereign' or a state-like entity capable of enforcing contribution of GPGs by all states, the supporters of the Global Public Goods insists on transnational framework, having a mix of persuasive as well enforceable power on member states, like the United Nations. In this domain, the role of geography or the spatial analysis takes the centre fold, wherein the policy and planning more on a natural geographical region like Mountainous region, or a flood prone/ drought prone area seems to be the most judicious option, among the available options.

The case in point is the role of spatial analysis in achieving Sustainable Development Goals as elucidated by Scott & Rajabsiford (2017). They noted that the United Nations has highlighted that for sound and decision-based decision making pertaining to SDGs, there needs to be cohesive approach for studying the geo-spatial data. Further, as highlighted by them, geography is crucial for data processing and ensuing policy making, as the locational information enhances the value of statistics. They argued that the role of spatial analysis is more pivotal to the developing and under developed countries in achieving the SDGs.

#### **Role of Networks in Policy and Role of Spatial Analysis in Network**

As an important part of policy and planning, the analysis and consideration of the shaping of networks as "sets of relations" is increasingly seen as an important part of planning theory and practice. Bijker and Law (1992) and Murdoch (2006) have already discussed the importance of networks in shaping policy and planning outcomes.

The study of human organization is historically achieved through Social Networks. Hillier (2007) identifies social networks as 'relational links through which people can obtain access to material resources, knowledge and power'. However, social

network theory tends to be largely aspatial or non-spatial, deriving its roots in sociology, and can miss how such networks may extend across space and act to link 'distant' people and places. It has been recognised that the spatial dimension has pivotal ramifications for place and people relations and is significant when considering the patterns of development and human behaviour.

As pointed by Parker & Doak (2012), researchers have recognized how networks can act to crumple or "pleat and fold" space and time. By taking this effect of networks into consideration, planners can think about policies and plans for particular bounded areas-asking for example, how discrete areas are connected and influenced by each other. This kind of analysis has been made possible because of an increased awareness of the complex assemblage of relations that structure and shape places, and the socio economic and environmental attributes affecting quality of life and sustainability as key objectives of spatial planning. Hence, thinking about given planned area should involve looking beyond the bounded place defined by administrative borders to include relations, flows and effects from both within and beyond that district, region or nation. For example: How is the economy of the Rhine Valley affected by the decisions made in New York, New Delhi or New Zealand? How is the socio-economic activity in one district or region affecting the quality of life residing in another? How is the environmental taxation policy creates demand-supply ripples elsewhere? How might national or international airport policy of a nation or continent impact on a whole range of actors, actions and possibilities? Taking this widened conceptualization of actants further also entails considering the actions and impacts of, for example, rivers, wildlife or technology in spatial planning process.

Hence networks provide a functional cross-boundary connections as recognized in Global Policy and Planning. Networks are seen as complex or heterogeneous assembly of relations and resources. They provide the necessary construct between Global Policy actors and Spatial processes. The Global Policy makers should recognize the way networks or associations are in flux and extend across boundaries, wherever connection or ties are present.

In the context of Global Policy, the theoretical background of Policy network and Issue networks are important as enumerated by Marsh & Smith (2000). Policy networks forms the foundation on which many developmental plans have been formulated and executed. The erstwhile Planning Commission of India is an example of Policy Network, wherein, the civil servants, researchers, professional planners, domain specialists as well as political executive participated. However, as pointed out by Murdoch (1998), while the policy networks are tend to be "prescriptive", the Issue networks are more "neogotiative". The issue networks tend to concentrate more on specific issue at the particular time. The Issue Networks tend to be more reactive associations that respond to a situation or proposal. Nonetheless, both forms the part of the one

continuum and the networks “coalesce” to provide the resultant outcome on a spatial plane.

As pointed by Parker & Doek (2012), it is acknowledged that many planning authorities recognize the need for understanding and engagement with existing Policy networks. Planners have become increasingly aware that they have to “map” networks in order to understand the way in which processes of planning and development take places in a region under consideration, how they can be facilitated and with what associated implications.

This is particularly true for Area based planning, i.e. pure Spatial Planning, wherein the role of effective planning has become more reticular as networks shape and influences places, developments, local economies, political considerations and social dynamics (Castells, 1996; Graham and Healey, 1999)

Hence, networks provide the basis of connection of Global policy and Geography, and the importance of latter is paramount in shaping the policy.

**Networks under Global Policy**

There is an abundant literature of Networks enshrined under Global Policy. However, most the literature, knowingly or unknowingly, concentrate on a single network or a group of networks. However, the holistic view of network science is still absent in most of the literature.

However, taking the inspiration from Stone (2020), the following network types are examined in the paper.

S. No.	Network Type	Participants/ Actors	Nature (Pubic v.Private)
1.	Trans-Governmental Networks TGNs	Civil Servants & Political appointees	Public
2.	Transnational Advocacy Networks TANs	Civil Society members	Private
3.	Transnational Private Regulation TPRs	Multi-stakeholder, market based for regulation and standardization	Private
4.	Transnational Public Private Partnership TPPP	State’s authority, Market forces and societal stakeholders	Voluntary association, often non-binding
5.	Knowledge Networks KNETs	Epistemic authority from Experts and Think-tanks	Mix of public & private sector

All the network types are elaborated in the subsequent sections and it has been highlighted that spatial analysis forms core of the networks and hence the global policy.

**Trans-Governmental Networks (TGNs)**

Trans-Governmental Networks (TGNs) can simply be considered as an extension of sovereign interests in such a way that respective governments participate in formulating a policy for stated objectives like security, development, facilitation of trade and planning for optimum utilization of resources, so that

the participants can heap mutual benefits. Since, this network is extension of sovereign interests, the network participants are usually the public servants and other political appointees. In these networks, the state is un-furled beyond its borders via cross-national connections among ‘high level officials directly responsive to the national political process – the ministerial level – as well as between lower level national regulators’ (Slaughter, 2004). These are networks of, for example, judges adjudicating on international fiscal and tax issues or legislators. As an illustration, consider the germination of Financial Action Task Force (FATF) in 1990s as a response to cross border terror financing and money laundering. Networks become tools for the maintenance of sovereignty where global problems are solved by ‘networked government’ collaboration. Accordingly, TGNs are the most public type of network among all the networks

OECD describes TGNs as as ‘cooperation based on loosely-structured, peer-to-peer ties developed through frequent interaction rather than formal negotiation, involving specialized domestic officials (typically regulators) directly interacting with each other’ (OECD, 2019). The organizations providesfour illustrations:

1. The Pharmaceutical Inspection Cooperation Scheme for the ‘maintenanceof mutual confidence, the exchange of information and experiencein good manufacturing practices and the mutual training of Inspectors’;
2. The European Public Administration network composed of the DirectorsGeneral responsible for Public Administration in the Member States of theEU;
3. The Basel Committee on Banking Supervision; andthe International Association of Insurance Supervisors (IAIS), which representsregulators in 190 countries and issues global insurance ‘principles’, ‘standards’ and ‘guidance papers’ under its remit.
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TGNs can be organized locally or regionally, infact they are most active at regional levels only. The fact that TGNs are most active regionally, itself highlights the importance of spatial analysis. As an illustration for India, BIMSTEC or The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation is the type of TGN, consisting of seven national governments. It is the physiography that defines all the littoral states of Bay of Bengalmust cooperate to make the Bay as “lake of prosperity”, it’s the oceanography and geology that identifies resource areas of the region, it’s the climatology that defines that dangers to the states from climatic change and rising sea level and it’s the demography that defines the distribution and characteristic of population – allwithin the realm of geography and spatial analysis. Infact, BIMSTEC (2020) itself states that BIMSTEC is also established as a platform for

intra-regional cooperation between other TGNs, namely SAARC (South Asian Association for Regional Cooperation) and ASEAN (Association of South East Asian Nations) members.

It has been argued by the analysts that TGNs are best organized spatially, as the sovereign governments tend to look proximity as a tool to increase trade. The proximity necessary entails that the sovereign nations shall be sharing the same physiography along the trade borders, same climate along the frontiers and cultural-historical connections, which all formed the part of geographical studies. The Hydrel-projects between the Governments of India and Nepal or between the Governments of India and Bhutan are based on the shared "geography." The problems created by the Projects, whether loss of fertile flood water or non-addressal of grievances of local communities, for example Madhesis (inhabitants of terai region of Nepal, which borders India), can find, both cause and effect, in geography only.

#### **Transnational Advocacy Networks (TANs) and Transnational Policy regulations (TPRs)**

Transnational Advocacy Networks (TANs), Stone (2020) explained, are the global civil society advocacy groups formulating the principles and guidelines for the civil servants and public sector for formulation of policy and planning. They are "outsider group" and basically act as a precursor to the mainstream action. Examples include issues related to gender emancipation (True, 2003) or the policies concerning tobacco, infant formula and pharmaceuticals (Andia&Cherov, 2017). They can be termed as "Global NGOs" working outside the domain of public control and acting as pressure group with international support.

Transnational Policy Regulations (TPRs), on the other hand mostly consists of business advocacy groups aimed at building a uniform standard for creating self-regulatory norms to serve their business and moral interests. They are pure market-based forces working to develop yardstick for global quality. Transnational private regulators issue standards in areas as diverse as the environment, sustainability, anticorruption and legality, human rights, data protection, product safety, and financial instruments etc., and are often complemented by the hard or soft law produced by international organizations and by nation-states (Cafaggi, 2019). Cafaggi further highlights that these are totally private funded with hardly any or no official participation from sovereign governments. Examples are environmental management systems or certification of sustainable fisheries that seek to bind multi-national companies (MNCs) to specific standards of due diligence or codes of conduct in production processes or management of global supply chains. The regulations for containment of child labour by the back office productions of many multinational merchandise firms also forms part of TPRs only.

These networks also examined spatially. As an illustration, consider the example for the control of "Blood Diamond" or "Conflict Diamond" trade of Africa. The "Blood diamond" (CNN, 2011) highlights the inherent insurgency of the spatial area, the low quality

of life of the people inhabiting the space and resource rich quality of the region. This spatial analysis of the region helped the Industry giants to develop standards and solution for containment of the said trade. IBM (The WSJ, 2016) launched an industry platform based on Block chain technology to identify the source (again spatial in nature) of the blood diamond and the spatial supply chain so that such diamonds may be curtailed from entering the mainstream industry, as Kimberely Process Certification Scheme appeared to be ineffective

#### **Transnational Public Private Partnerships (TPPPs)**

Transnational Public Private Partnerships highlights the emergence of global partnerships in policy making and planning, and thus, represents the true global policy in action. These are the networks of convergence of tri-partite coordination between sovereign government agencies and Regional associations on one hand, Multinational market-based and profit-oriented forces on the other, and Civil society, NGOs and Pressure groups as the third participant. These are the international groups in which membership may or may not be compulsory, but nevertheless, the groups exert high institutional as well as international pressure on the countries. As Stone (2020) pointed out, the official participation of public actors definitely accords some 'insider' status and public authority to TPPPs. They can be manifested as transnational bureaucracies given that they pursue public objectives and receive governmental and other forms of official funding and support. Often, they are established as a new organization with a governance structure and a management unit to achieve its stated goals and objectives.

Most of these TPPPs are housed inside the major multilateral organizations, notably United Nations and World Bank, and on a more regional scale, ASEAN, ADB or APEC. The United Nations publication Critical Choices, authored by Reinicke and Francis Deng (2000), among others, listed half a dozen advantageous features of TPPPs for managing the challenges pertaining to global public-policy paradigm. At the outset, TPPPs are effective at placing new issues, which prima facie, seems to local or regional, on the global agenda. They raise international consciousness of acute problems requiring immediate attention like the oil spills on the distant lands. Second, these networks in conjunction with Trans-governmental networks, are effective instruments to negotiate and set global standards; they function as fora that convene a range of stakeholders to negotiate cooperation in fields as diverse as environmental management or money laundering. Third, these networks act as fountain head for dissemination of empirical analysis and innovative solutions to the concerned. Fourth, the private-sector participation helps make TPPPs tools for creating and deepening markets; that is, a mechanism to manage the gap between demand and supply in provision of Global public goods. For example, many organizations, notably GAVI (2019) or the Medicines for Malaria encouraged the pharma-trade to provide the lifesaving drugs at the reduced and affordable

costs to the poor sections and underdeveloped regions. Further, with an effective public-sector sponsorship, TPPPs are mechanism for policy implementation of inter-governmental treaties as well as providing monitoring and evaluation. Further, many researchers consider that these networks build not only communication channels but also social capital and trust through the inclusive public-private partnership.

The United Nations and World Bank have taken a lead in organizing in organizing these networks in terms of organizing environmental summits under UNEP, Development summits under UNDP or Global task Force for Global Public Goods. However, there is mushrooming of privately organized forums like World Economic Forum, Doha Forum or Global Drug Commission. These forums have proved to be instrumental in highlighting the lacunas in policy-planning matrix in the global arena.

However, as with the other network typologies, spatial analysis forms the core of the Networks paradigm. As an illustration, World Commission on Dams WCD (International Rivers, 2019), one of the examples of such TPPP, existed between 1997-2001, was primarily constituted to address the issue raised by the proponents and opponents of mega dams in the world. The Commission proposed a ten-point solution framework based on the spatial analysis of the changes in land use and socio-economic patterns in the vicinity. While discussing the influences of WCD report, Schulz & Adams (2019) has inherently discussed the role of spatial analysis in elaborating the outcomes of policy formulation of dams viz a viz recommendations of WCD. Here again the spatial analysis forms the core of TPPPs and thus inherently involves geography in the understanding. By contrast, the other end of sustaining organizations like the one established in 1971, known as the Consultative Group for International Agricultural Research (CGIAR) is one of the oldest and largest global partnership programs. The consultative group acts as bridge between multifarious organizations working with diverse objectives such as sustainable use of natural resources, rural employment, gender emancipation, food security etc. These inherently are the studied on the spatial planes, highlighting the importance of spatial studies.

One interesting study by Lorne and McDonald (2019) highlights that how space is integral to the study of and evaluation of health care systems and services in the Greater Manchester Region. The study highlighted that extended health paradigm is not just shaped by public and regional participants, but rather by concerned think tanks, international organizations and global management consultants. The "devolution" has brought a whole new set of geographical connections, identifiable on space. The partnership team between national and international delegates forged greater cooperation channels with the multinational health experts across the Atlantic, particularly the New York State, so that best practices can be shared across continents. The federal government, in cohesion with local government,

identified policy decisions to attract Global Pharma giants. Through the effective use of Information Technology, all the stakeholders were not only invited but encouraged to be participative so as to highlight the region of Greater Manchester as a pioneering and integrated health care system.

The concept of "One Health" is a step ahead, which again can be well studied via spatial analysis. World Health Organization (WHO, 2020) highlights "One health" as a paradigm in which multiple actors-regional and international intrinsically participate and simultaneously work on communities, environment and flora-fauna to achieve the better public health outcomes. While highlighting the importance of One Health, the Centre of Disease Control and Prevention (CDC, 2019) highlights that "One Health" works on local, regional, national and global levels, across the communities to achieving the desired health objectives. Hence, the policy formulation as well as planning is studied and evaluated on spatial lines only. The recent COVID-19 pandemic has provided the impetus of "One Health" paradigm (The Hindu, 2020)

#### **Knowledge Networks KNETs**

In the backdrop of the "Evidence based Policy", over the past 30 years, an increasingly strong discourse emitting from governments and international institutions highlighted the need to 'bridge research and policy' (Court and Young, 2006) and utilize K4D (Knowledge for Development) in the Sustainable Development Goals (Thompson, 2018).

This knowledge utilization discourse is symptomatic of the wider evidence-based policy movement that emerged in the socio-political systems of the western nations towards the turn of the century (Head, 2013). Many research domains have tried to address the disenchantment between research and planning at one hand, or evidence and decision-making at other, through the manifestation of 'science diplomacy'. Common to each manifestation is a desire for improved knowledge utilization in governance in order to generate better, or better informed, policy processes and outcomes.

Central to expert power in global policy processes are 'knowledge networks', or KNETs as shorthand. As Stone (2020) pointed out, the value of networks to scientific advancement has long been noted with concepts like 'epistemic communities' (Haas, 2015) and the 'invisible college' (Wagner, 2009). Knowledge networks form around a shared scientific interest and are organized into a system of coordinated research to create and transfer knowledge. KNETs are characterized by practices such as regularized intellectual exchange, peer review and financing across national boundaries (Sending, 2019). KNETs are both 'scientific' and policy relevant. But KNETs take quite different shape. They differ on criteria of legal status, membership, degree of institutionalization and issue focus, deriving their genesis from International relations.

Spatially, the Regional networks have multiplied and are as diverse as the Baltic Science Network and the ASEAN Regional Knowledge

Network on Law Enforcement and Governance (ARKN-FLEG). There are also permanent global scientific entities like the Global Forum for Health Research, the Intergovernmental Panel on Climate Change (IPCC) or CGIAR which have long-term funding to employ secretariats and scientific officers. There are many more temporary networks that coalesce around a specific project or funding stream, illustrations include the private philanthropic organization like the Gates Foundation. However, it is to be noted that all these networks are again spatially based.

Infact, Stone (2020) identified the KNETs can be seen as type of other networks i.e. TGNs, TPRs, TANs or TPPP, with more of Epistocracy. Hence, spatial analysis is also central to KNETs.

### Conclusion

The study highlights that all the networks enshrined under the Global Policy Realms are based on spatial analysis and hence inherently based on geography. All the planning-policy paradigm works on a simple premise to "map-out" the developmental or security objectives on a given plane, hence inherently geographical. However, the geography and consequently, the geographers are not getting the attention among the policy makers which they should. These points to the lacunae in the policy and planning systems, which might be responsible for some unsolved problems of policy.

Global Policy making is going through three definitive changes. First, global policy, in tandem with the global problems, which it sought to address, has witnessed an expansion of its agenda and are not just pivot around supporting the regional communities. Policy making has become an ever-comprehensive paradigm, addressing additional issues like financing, or otherwise supporting and delivering 'global public goods' (GPGs) (Kaul, 2019). This calls for the geographer's point of view to be enshrined in Global Policy domain as Human Geography can address the lacunae in resource distribution. Second, the public and institutional participants do not enjoy the relative preponderance over the decisions, rather they become sort of equal partners with the civil society and private international community. This partnership entails studying the spatial niche in which every actor exists, which, in most of the cases, spatial and geographical in nature. Third, the instruments used by this expanding array of actors to achieve a broader range of policy objectives have themselves mushroomed with the emergence of transnational policy institutions, innovative regulatory structures and global networks created to deliver, finance or monitor regional and global GPGs. These circumstances also generate a governance conundrum by fueling the fragmentation of global policy into many different 'sectors', a dynamic also known as 'differentiation' (Sending, 2019). This differentiation is essentially a more evolved form of "areal differentiation", coupled with economics of the region. The discussion in the preceding paragraphs have amply highlighted that. Kaddar and Schimtt (2012) has elaborated the efficiency and efficacy of vaccines in middle income countries using spatial analysis, using areal

differentiation as the main tool. Scott & Rajabsiford (2017) also used spatial analysis for understanding the achievement in terms of Global Public Goods.

The spatial and analytical conceptualization of regional synthesis and areal differentiation is core to all the changes and as presented above required in all the networks. The inherent role of spatial analyses needs to be highlighted, which is yet to be acknowledged at any level. This further illustrates that almost total absence of geographers in policymaking. Quoh (2011), an economist, has studied spatial localization of Global Economy's shifting center of gravity. Using gross domestic product calculations, he identified that center of gravity was shifted from Mid-Atlantic in 1980s to East of Helsinki and Bucharest in 2008, due to continuing economic rise of China and East Asia. He further argued that center of gravity shall shift between India and China in 2050. The said spatial shifting would have immense policy implications on global politics and economics. The study again established that though geography is the core of research, the same has not been acknowledged. It is high time that the role of discipline pertaining to the study of spatial analysis be acknowledged and given due credence. There needs to be systematic adoption of geographers in the policy-planning realms so that policy formulation may be more effective and can achieve its desired objectives.

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