# Introduction of KPI (KRA Positive Index) For Scrutinizing GP (Global Player) Countries of this ERA

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Abstract: Policymakers must be less national when contemplating measures for the national economy and formulating national policy to accommodate regional and global measures. To assist policymakers, there is currently no suitable index to identify global participants, thus the necessity to build an index methodology based on real and acceptable values of national strength for given criteria is felt strongly. This indexing system, based on the total of values for several positive criteria in nations' social, political, economic, and military aspects (KRA), is provided here to identify Global Player(GP). GP must be determined from greater influencing value in KPI matrix, remainder nations are Non-Global Player(NGP) for this study. Based on rounding norms, nations scoring over 50 out of 100 are Super Powers and above 25 are Great Powers; both are Global Players. The estimated findings were compared to world's geographical region, continent numbers, and prior survey results. This clarifies the necessity for regional collaboration among NGP leaders to establish mutual strength before engaging global entities. It is possible that if this concept is successfully implemented, it might assist to restructure the international order and the United Nations for the sake of long-term peace.

**Keywords:** Global Player Countries, Power and Influence, KRA positive index *Abbreviations:* [KPI, KRA, GP, NGP].

#### Introduction

Through the technological advancement with industrial revolution 4.0 the world has turned to a global village, Artificial intelligence and Internet of things are bringing new challenges for the human capacity and control over the future path of our civilization, in the above context this attempt is made to know who the change makers of the world are or who influences the global policy of this era.

As we look back into the history until the World War II there used to be emperors having their empires with great powers, used to maintain the balance of global powers, while rise and fall of empires and shifting of their epicentres were continuous historical process. Dutch-American geo-strategist Nicholas J Spykman (1944) during the war in a series of lectures presented his RIMLAND concept as the

foundation of power balance and basis of global order of post war era(Nicholas, 1944), before him in Britain Sir Halford John Mackinder presented his Heart Land concept on international relations and world order (Mackinder, 1904).

However after searching articles published during last decade on powerful, important or influential countries of the world it was found that, few were based on authors self-opinion, few on global perception based survey, others on voting or perceived important by the news coverage on legendary media, so the need to develop a transparent methodology based on authentic and acceptable values of country strength for given criteria is strongly felt, based on the summation of the values for multiple positive criteria in social, political, economic and military aspects of countries, here an indexing methodology KPI is proposed to identify the global player (GP) countries from higher influencing value in KPI matrix, rest countries shall be known as Non-global players (NGP) countries for this research work.

#### Literature Review

David L Western in his article "The Asian Crisis: Internal or External Causes' said " In summary, there is some credibility to the view that Asia's crisis was partially externally driven, as international forces were at work in destabilizing the region". (Western, 2000)

Here we need to clearly understand those external and internal forces dynamically shaping the Economy and defining the development of a nation state, where we know only few major players have the capacity influence forces external to them, which are the International or Global forces. Hence policy makers in smaller nations while considering internal measures for national economy and formulation of national policy, must carefully be less national to accommodate the Regional and Global measures (which are definitely beyond control of any small nation), to gain leverage over those measures smaller countries should enter into Regional engagement with other smaller nations and at the same time these smaller nations to choose their development partner or partners from among the Major Global players, successful implementation of this theory would help reform of future world order and future of united nations for sustainable Global Peace, Political theorists like Niccolo Machiavelli and others have explained power as a goal or objective in international relations (Machiavelli, 1513). Powers could be coercive, attractive, cooperative or competitive abilities of countries to exercise over others, earlier physical capacities like military power and economic powers were considered as source of influence for nations, Nye (1980) was first among political theorists to explain soft power as source of influence based on human values (Nye, 1980), later a combination of both as smart power was proposed by other theorists.

British-American historian Paul Kennedy in his famous book "The Rise and Fall of the Great Powers" (1987) tried to show the relative status of various powers between AD 1500 to 2000 of CE (Kennedy, 1987), William T R Fox in 1944 used the term superpower (Hall,1944), other terms used by geo-strategists are great power, middle power, regional power and small power, for the purpose of this study we shall consider

both super power and great power as global players, ignore regional power (as that may be done separately for each geographical region) and consider rest all as smaller countries.

There are few major aspects like military, economic, natural, social, knowledge, value system and spiritual under which following criteria may be considered as potential source of a country's influence over others:-

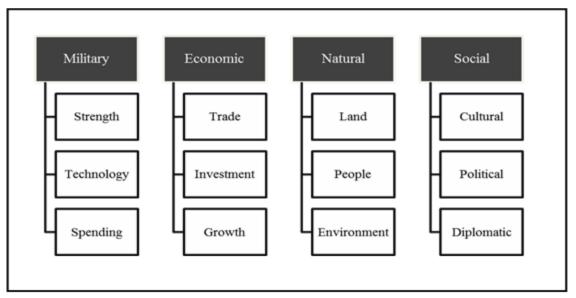


Figure 1A: Criteria under major aspects as potential source of country's influence on global affairs

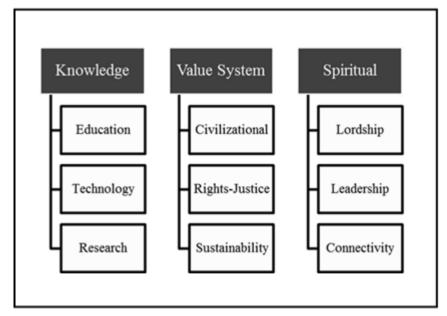


Figure 1B: Criteria under major aspects as potential source of country's influence on global affairs

However all above criteria do not have authentic and well accepted values for countries for utilizing in our research, hence we would use only 10 criteria for which internationally accepted values are available.

An article titled "Top 10 Most Influential and Powerful Countries of the World "by Inspirich (2013) was published on People & Politics, Travel, June 21, 2013 where author considered economic conditions, education system, employment rate, military position and the quality of their citizens to enumerate top 10 influential countries of the world (Inspirich, 2013).

The 12 most important countries of the year, according to The New York Times by Weller (2015) published on Tech Insider, December 23, 2015 where author used list of countries with highest GDP and newsworthiness on NY Times articles to find most important countries (Weller, 2015).

The 10 most influential countries in the world have been revealed by Hall (2016) published on Independent (UK), January 26, 2016 were based on voting of 16,000 people from around the world on nine different criteria including sense of adventure, citizenship, cultural influence, entrepreneurship, heritage, predicted GDP growth between 2014 to 2020, how open for business the country is, power and quality of life (Hall, 2016).

The Eight Great Powers of 2017 by Mead (2017) published on The American Interest, January 24, 2017 was a research paper sponsored by Hudson Institute where expert views pave the foundation to enlist eight great powers of the contemporary world (Mead, 2017).

These are the Top 5 Most Influential Countries by Haynie (2018) published on U.S.News, January 23, 2018 where author enlisted 5 most influential countries established through a global perception based survey referred to military power, alliances, Food & Entertainment, leader, connected to rest of the world, cultural and political influence conducted among more than 12,000 informed elite (Haynie, 2018).

Top 10 Most Powerful Countries in the World 2018 by Quinn (2018) published on Entertainment section of IMPROB, July 7, 2018 based on the analysis of US News & World Report (Quinn, 2018).

10 Countries that Contribute the Most to the World by Kempker (2018) published on wildjunket.com, January 18th, 2018 where keeping 125 countries under scrutiny, each country is rated in seven areas including culture, international peace &security, world order, planet & climate, prosperity & equality, health and wellbeing, and science & technology (Kempker, 2018).

Considering all these voting, perception survey, opinion and analysis could be biased and subjective, we tried to develop a country influence indexing methodology based on positive strength criteria which have authentic and accepted values, leaving a transparent and logical method for future researchers with flexibility for amendments.

#### Methodology

We shall identify Global Players or influential countries of this world era in following manner

a) As there are no index available for the influential countries of the world, we propose an index called KRA Positive Index (KPI) to identify influential countries.

- b) For KPI calculation 10 major criteria on global basis shall be used to show the country strength, criteria for which authentic and well accepted values are available. However when authentic and well accepted values for all criteria are available , then AHP analysis could be utilized to select top ranking criteria by comparing all criteria with each other using pair wise comparison method.
- c) While choosing criteria all major aspects like Natural, Economic, Military, Social, Knowledge, Value System and Spiritual must be covered to reveal total strength of any country.
- d) Positive values shall be derived for each country based on strength criteria by numbering 10 to 01, for the top ten countries in any given field of consideration.
- e) KPI shall use AHP analysis in principle for selecting criteria and summation of the values shall be utilized for country influence indexing, where gross higher positive values shall reveal the higher influence of any country as global player.
- f) The formula used to derive gross KPI value for any country's influence at global level is  $L = \sum (A, B, ...., H, J, K)$ , where L is the KPI value for any country and A, B,....K are the values allocated to a country based on her strength in any criterion in consideration, from global top ten ranks in that field of consideration by using tables for each criterion, then a super matrix is formed to calculate gross KPI value.
- g) Upon obtaining KPI gross value how many countries could be termed as influential (global player) may be resolved in two alternative manner. Firstly by benchmarking gross value (countries obtained above a predetermined gross KPI value) achieved or secondly by considering an ideal number of countries based on global geographical representation (predetermining the number of players).
- h) For the first case based on gross KPI value out of a maximum possible 100 in total 10 criteria, countries scoring above 50 could be termed as Super Power (based on the theory of rounding number), countries scoring between 25 to 50 could be termed as Great Powers (for the next tier also based on the theory of rounding number) both together as Global players, rest countries are considered as NGP (Non-global player) countries. Countries scoring between 12.5 to 25 could be recognized as regional powers but not considered for our current research, as finding regional powers through separate regional study would be more suitable considering different context of that region.
- i) For the second method based on an ideal number of countries in view global geographical regions, as there are seven continents on globe, taking seven as base number, globally influential countries at any given point of time would probably be (7-3) to (7+3) during times of turmoil, transition and instability, but during peace time they would continuously realign the balance of power in favour to reach in one, two or Three axis's. In descending order up to 10 countries may be termed as global players, considering top 3 as super powers and following 4 to 10 ranking countries as great powers, for which case a moderate total of (7X3)= 21 countries may be considered as

regional powers and rest may be NGP countries with little or no influence in shaping global policy.

- j) KRA (Karim-Rahman-Abdul) is the term used from the names of the researchers in the team, and we are using primarily positive parameters of country strength to reveal her international or global influence, hence the phrase "KRA Positive Index" is used.
- k) However, future researchers may use other alternative parameters to identify global influential countries, Negative criterion like Adverse Environmental Impact Order (AEIO) could also be used to identify influential countries as it is mostly seen that more powerful countries those harbour larger economies have cared less for the environment protection.
- l) Maritime Infrastructure like port facilities and shipping volume index would also reveal the global influence of that hinterland in consideration, which can be used for country influence capacity cross check between global player countries and maritime cluster (regionalised group of maritime littoral countries) in the areas of trade and commerce. But that shall not reveal their capacity to exert influence in international arena in the Defence and Diplomatic domains.

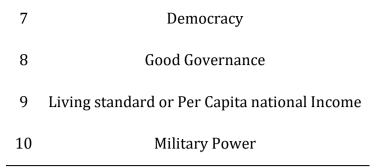
## **Findings**

Considering natural, social, economic and military aspects following criteria were used to obtain KPI value for 21 countries of the world, based on those individual KPI values a super matrix constructed to calculate the gross KPI value of each country for ranking of globally influential countries, Global players (GP) and NGP countries are identified primarily, however if regional union or association or maritime clusters are considered could reveal a different scenario.

Criteria for finding global players may include following, as authentic and well accepted values for few other criteria are yet to develop:-

Table A1: Criteria for finding global players

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No	Criteria			
1	Population			
2	Land Area			
3	Gross Domestic Product (GDP)			
4	Annual Foreign Trade Gross volume			
5	Balance of Payment (BOP)			
6	Membership in UNSC and Veto Power			



For all above criteria we shall take top ten countries of the world and outline the super matrix, from the super matrix cumulative value we can find the top scoring countries as global player (GP) countries, rest countries we would term as NGP countries for the purpose of our study on identifying global players.

Which could help the smaller maritime littoral states to understand and act towards Development of Maritime Cluster through Regionalism (DMCR) for the sustainable maritime growth.

Here as we did not find any index to identify global players among the countries of the world, we proposed this index to find out cumulative positive strength of countries for identification of global players, which shall be known as "KRA Positive Index (KPI)" for future research and references, however future researchers may develop further new KPIs to test positive and negative strengths of countries to identify their contemporary global influence.

Inserting below list of top 10 countries for each of the criteria in consideration for this research:-

#### 1. Top 10 most populous countries (July 1, 2018) [A]

Table below showing value A for top ten countries based on Population criterion while current World Population is 7,476,476,793 on July 1, 2018.

Table 1: Value of A for top ten countries based on Population criterion

SL	Country Name	Country	World	Value obtained for this
No	Country Name	<b>Population</b>	rank	Criterion , A
01	China	1,384,688,986	01	10
02	India	1,296,834,042	02	09
03	United States of America	329,256,465	03	08
04	Indonesia	262,787,403	04	07
05	Brazil	208,846,892	05	06
06	Pakistan	207,862,518	06	05
07	Nigeria	195,300,343	07	04
08	Bangladesh	159,453,001	08	03
09	Russia	142,122,776	09	02

10	Japan	126,168,156	10	01

Source: United States Census Bureau, current population, July 1, 2018

#### 2. World's Top ten countries by Land Area [B]

Table below showing value B for top ten countries based on Land criterion

Table 2: Value of B for top ten countries based on Land criterion

SL	Country Name	<b>Country Land</b>	World	Value obtained for this
No		Area	rank	Criterion , B
01	Canada	17,098,242	01	10
02	Russia	9,984,670	02	09
03	United States of	9,826,675	03	08
	America			
04	China	9,596,960	04	07
05	Brazil	8,514,877	05	06
06	Australia	7,741,220	06	05
07	India	3,287,263	07	04
80	Argentina	2,780,400	80	03
09	Kazakhstan	2,724,900	09	02
10	Algeria	2,381,741	10	01

Source: <a href="https://www.worldatlas.com/">https://www.worldatlas.com/</a>

## 3. World's top ten countries by GDP

The nominal GDP of the top 10 economies adds up to over 68% of the world's economy, and the top 15 economies add up to about 76%. The remaining 172 countries constitute less than a quarter of the world's economy.

Table 3A: Top 10 countries by Per Capita GDP

Rank	Country	GDP	Per Capita GDP
01	USA	\$19.42 trillion	\$59,609
02	China	\$23.19 trillion	\$16,676
03	Japan	\$5.42 trillion	\$42,860
04	Germany	\$4.13 trillion	\$49,814
05	United Kingdom	\$2.91 trillion	\$44,001
06	India	\$9.49 trillion	\$1,850
07	France	\$2.83 trillion	\$43,652
80	Brazil	\$3.22 trillion	\$15,485
09	Italy	\$2.3 trillion	\$37,905
10	Canada	\$1.75 trillion	\$47,771

Table below showing value C for top ten countries based on GDP criterion [C]

Table 3: Value of C for top ten countries based on Gross Domestic Product

SL No	<b>Country Name</b>	World rank	Value obtained for this Criterion, C
01	USA	01	10
02	China	02	09
03	Japan	03	08
04	Germany	04	07
05	<b>United Kingdom</b>	05	06
06	India	06	05
07	France	07	04
80	Brazil	80	03
09	Italy	09	02
10	Canada	10	01

Source: https://www.investopedia.com/articles/investing/022415/worlds-top-10-economies.asp, by Prableen Bajpai CFA

## 4. Global rank for top ten countries based on Gross Export criterion [D]

This is a list of countries by merchandise <u>exports</u>. Here EU data kept to show how integration changes scenario. Table below showing Global rank for top ten countries and EU zone based on Gross Export criterion.

Table 4A: Global rank for top ten countries and EU zone based on Gross Export criterion

Country	Exports	Year	% of GDP[2]	World rank
	(million \$)			
<u>China</u>	\$2,157,000	2017 EST.	19.6	1
European Union	\$1,900,000	2016 EST.	43.0	Non country
<u>United States</u>	\$1,576,000	2017 EST.	11.9	2
Germany	\$1,401,000	2017 EST.	46.1	3
<u>Japan</u>	\$683,300	2017 EST.	16.1	4
Korea, South	\$552,300	2017 EST.	42.2	5
<u>France</u>	\$541,300	2017 EST.	29.3	6
Hong Kong	\$540,000	2017 EST.	187.4	7
<u>Netherlands</u>	\$526,400	2017 EST.	82.4	8
<u>Italy</u>	\$499,100	2017 EST.	29.8	9
<b>United Kingdom</b>	\$436,500	2017 EST.	28.3	10
<u>Canada</u>	\$433,000	2017 EST.	31.0	11

Source: The World Factbook of the CIA.[1]

Table below showing value D for top ten countries based on annual Export criterion

Table 4: Value of D for top ten countries based on annual Export criterion

SL No	Country Name	World rank	Value obtained for this Criterion,
			D
01	China	01	10
02	United States of	02	09
	America		
03	Germany	03	08
04	Japan	04	07
05	South Korea	05	06
06	France	06	05
07	Netherlands	07	04
80	Italy	08	03
09	<b>United Kingdom</b>	09	02
10	Canada	10	01

## 5. Top Ten Countries by Balance of Payment (BOP) [E]

Table below showing value E for top ten countries based on BOP criterion

Table 5: Value of E for top ten countries based on BOP criterion

SL	Country	Country BOP	World	Value obtained for this
No	Name		rank	Criterion , E
01	Germany	295,999,995,904	01	10
02	Japan	174,999,994,368	02	09
03	China	162,500,001,792	03	08
04	South Korea	85,139,996,672	04	07
05	Netherlands	82,440,003,584	05	06
06	Taiwan	79,000,002,560	06	05
07	Switzerland	67,329,998,848	07	04
80	Singapore	59,790,000,128	80	03
09	Italy	52,829,999,104	09	02
10	Thailand	44,000,002,048	10	01

Source: https://www.indexmundi.com/g/r.aspx?t=0&v=145&l=en

## 6. Top Ten Countries by Membership in UNSC and Veto Power [F]

The Council (United Nation's Security Council) is composed of 15 Members:

- Five permanent members:
  - China, France, Russia, United Kingdom and United States.
- And ten non-permanent members elected for two-year terms by the General Assembly (with end of term date):
  - Bolivia (2018) , Ethiopia (2018) , Kazakhstan (2018) , Netherlands (2018) , Sweden (2018) , Cote d'Ivorie (2019) , Equatorial Guinea (2019) , Kuwait (2019) , Peru (2019) and Poland (2019)

For indexing all permanent members 10 point each and non-permanent members 5 point each shall be given to find the country's total points as major player country in the world. Table below showing value F for UNSC member countries based on permanent and non-permanent membership criteria.

Table 6: Value of F for top ten countries based on UNSC membership and veto power

No.	Country	Value obtained for this Criterion, F
01	USA	10
02	Russian Federation	10
03	China	10
04	United Kingdom	10
05	France	10
06	Netherlands	5
07	Sweden	5
80	Poland	5
09	Peru	5
10	Kazakhstan	5
11	Kuwait	5
12	Bolivia	5
13	<b>Equatorial Guinea</b>	5
14	Ethiopia	5
15	Cote D'Ivorie	5

Source: <a href="http://www.un.org/en/sc/members">http://www.un.org/en/sc/members</a>

#### 7. Top Ten countries by Democracy [G]

This chart shows the 2017 democracy index score (10 = full democracy. 0 = authoritarian regime). Table below showing value G for top ten countries based on Democracy criterion

**Table 7: Value of G for top ten countries based on Democracy** 

SL No	Country Name	World rank	Value obtained for this Criterion , G
01	Norway	01	10
02	Iceland	02	09
03	Sweden	03	08
04	New Zealand	04	07
05	Denmark	05	06
06	Ireland	06	05
07	Australia	07	04
80	Canada	08	03
09	Finland	09	02
10	Switzerland	10	01

Source: <a href="https://www.statista.com/chart/12771/the-best-and-worst-countries-for-democracy/">https://www.statista.com/chart/12771/the-best-and-worst-countries-for-democracy/</a>, by <a href="https://www.statista.com/chart/12771/the-best-and

# 8. Top Ten Countries by Good Governance [H]

Table below showing value H for top ten countries based on Good Governance criterion

Table 8: Value of H for top ten countries based on Good Governance criterion

SL No	Country Name	World rank	Value obtained for this Criterion , H
01	Switzerland	01	10
02	Canada	02	09
03	Germany	03	08
04	United Kingdom	04	07
05	Japan	05	06
06	Sweden	06	05
07	Australia	07	04
08	United States of America	80	03
09	France	09	02
10	Netherlands	10	01

Source: <a href="https://www.usnews.com/news/best-countries/overall-full-list">https://www.usnews.com/news/best-countries/overall-full-list</a>

## 9. Living standard or Per Capita national Income [J]

"With a population less than one-fourth that of China, the U.S. is still projected to remain one of the world's most prosperous economies in terms of <u>per capita GDP</u>, which reflects living standards and <u>quality of life</u> for a nation's residents. Even so, it throws an interesting light on the whole subject of GDP and global economies. But the U.S. is far from the top in terms of GDP per capita (PPP), where it claims 13th place. That's after oil rich nations such as Qatar, Kuwait and Norway, as well as Luxemburg, Switzerland and Singapore.

- Qatar \$129,112
- Luxembourg \$107,737
- Macao SAR \$98,323
- Singapore \$90,724
- Brunei \$76,568
- Ireland \$72,529
- Kuwait 71,307
- Norway \$70,666
- United Arab Emirates \$68,425
- Switzerland \$61,014

However, the U.S. ranks eighth in terms of GDP per capita when compared in nominal terms, after Luxembourg, Switzerland, Norway, Macau SAR, Iceland, Qatar and Ireland. Australia and Denmark take the ninth and tenth spots." Table below showing value J for top ten countries based on Living Standard or per capita income criterion

Table 9: Value of J for top ten countries based on Living Standard or Per Capita

National Income

SL No	Country Name	World rank	Value obtained for this Criterion , J
01	Quatar	01	10
02	Luxembourg	02	09
03	Macao SAR	03	08
04	Singapore	04	07
05	Brunei	05	06
06	Ireland	06	05
07	Kuwait	07	04
80	Norway	08	03
09	<b>United Arab Emirates</b>	09	02
10	Switzerland	10	01

Source: https://www.usatoday.com/story/money/economy/2018/06/21/richest-countries-in-world-based-on-income/35953213/

## 10. Top ten countries by Military Power [K]

Table below showing value K for top ten countries based on Military criterion

Table 10: Value of K for top ten countries based on Military criterion

SL No	Country Name	World rank	Value obtained for this Criterion , K
01	United States of America	01	10
02	Russia	02	09
03	China	03	08
04	India	04	07
05	France	05	06
06	United Kingdom	06	05
07	South Korea	07	04
08	Japan	08	03
09	Turkey	09	02
10	Germany	10	01

Source: <a href="https://www.globalfirepower.com/countries-listing.asp">https://www.globalfirepower.com/countries-listing.asp</a>

#### **Results**

The following super matrix is formed to summarize gross KPI value for potential countries from individual criterion strength, for the purpose of identification of global players.

Super Matrix below for finding most influential countries of the world, those who can dominate the world policy and the world order of this ERA, top 8 countries identified by using KRA Positive Index method.

Table 11: Super Matrix for calculating Gross KPI value and finding GP countries

Country	A	В	С	D	Е	F	G	Н	J	K	∑(A,,K)	L
USA	08	08	10	09		10		03	03	10	61	02
Russia	02	10				10				09	31	05
China	10	07	09	10	80	10				80	62	01
India	09	04	05							07	25	07
France			04	05		10		02		06	27	06
Germany			07	80	10			08		01	34	04
Uk			06	02	09	10		07		05	39	03
Japan	01		80	07				06		03	25	08
Italy			02	01	02						05	
Canada		09	01				04	09			23	
Brazil	06	06	03								15	
Indonesia	07										07	
Bangladesh	03										03	
Pakistan	05										05	
Nigeria	04										04	
Australia		05					03	04			12	
<b>South Korea</b>				06	07					04	17	
Singapore					03				07		10	
Turkey										02	02	
Netherlands				03	06	05		01			15	
Israel											00	

Here only 02 countries scored above 50 and based on the theory of rounding numbers, could be termed as Superpowers of this global age are USA and China , another 06 countries scored between 25 to 50 also based on the theory of rounding number, could be termed as great powers are UK , Germany , Russia , France , Japan and India , a total of 08 countries scored 25 or above out of 100 , these are the countries capable of dominating world policy of this ERA and hence we call them the global players of the contemporary world.

Rest of the countries having little influence on the world policy or no impact at all on the world order of this age (of which few may be regional powers scoring between 12.5 to 25 KPI gross value, but we are not considering those for this research, as each geographical region shall require separate study to establish regional powers), countries scoring below 25 in Gross KPI value shall be known as 'NGP (Non-global player) countries' for the purpose of our this research work.

#### **Recommendation and Conclusion**

We proposed an index to find out cumulative positive strength of countries for identification of global players, which shall be known as "KRA Positive Index (KPI)" for future research and references.

Here, in KRA (from the names of the research team in short, Karim-Rahman-Abdul) positive index we have considered only positive strengths of countries to find their global influence, however other complex methods may be developed and used for same purpose.

- a) Future researchers may use other alternative parameters to identify global influential countries, Negative criterion like Adverse Environmental Impact Order (AEIO) could also be used to identify influential countries as it is mostly seen that more powerful countries those harbour larger economies have cared less for the environment protection.
- b) Maritime Infrastructure like port facilities and shipping volume index would also reveal the global influence of that hinterland in consideration, which can be used for influence capacity cross check between global player countries and maritime cluster (i.e. regionalised group of NGP countries, which is top down approach in maritime clustering in contrast to traditional bottom up approach of maritime clustering) in the areas of trade and commerce. But that shall not reveal their capacity to exert influence in international arena in the Defence and Diplomatic domains.
- c) Regional union or association or maritime cluster may reveal different results than individual countries in consideration, which would allow smaller nations to rethink on their national policy to work towards DMCR (Development of Maritime Cluster through Regionalism) and achieve sustainable blue economic growth.

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