



## A THEORETICAL ANALYSIS UPON THE ENVIRONMENTAL HEALTH AND JUSTICE ISSUE: A CASE STUDY FOR A COMPARISON BETWEEN G20'S UNITARY AND FEDERAL MEMBERS

Soner AKIN<sup>1</sup> ---Zehra Gül<sup>2</sup>--- Uğur Yıldırım<sup>3†</sup>

<sup>1</sup>Mustafa Kemal University, Assistant Doctor, Public Administration Department, Turkey

<sup>2</sup>Kahramanmaraş Sutcu Imam University, Assistant Professor, Health Administration Department, Turkey

<sup>3</sup>Kahramanmaraş Sutcu Imam University, Professor, Public Administration Department, Turkey

### ABSTRACT

*Environmental health and its ties with carbon emission policies have gradually become a hot topic in environmental agenda of nations. In this study, we discuss the issue as environmental health and justice issue in different types of governmental approaches in public management. In this respect, the comparative position of federal and unitary governments were paid attention and the status about sustainable development prospects were analyzed together through looking at the CO2 emission rates and the workers who are under the effect of those policies, benefiting from disability adjusted life years (DALY) statistics.*

**Keywords:** Environmental health, Environmental justice, CO2 emission, Disability adjusted life years, Sustainable development.

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### Contribution/ Originality

This study contributes in the existing literature on the relation between disability adjusted life years and environmental justice policies.

### 1. INTRODUCTION

Policy making issue struggles with finding a model upon environmental sphere for today's agenda on behalf of the national and international praxis. This long term struggle is related with the hybrid nature of the environmental sphere of politics, and we think that an analysis benefiting from the health policies' praxis could be reinvented to assess the true nature of environmental risks for political foresight studies. Therefore, the discussion arena which covers the environmental health topics could be a way of thought to evaluate the life quality of human beings added up with the improvement of health status amalgamated with environmental justice at all.

The issues created around the environmental health discipline have become gradually sources of interests at health policy planners and environmental policy maker's side. Thinking local governments' powerhouses in USA and national or supranational samples of praxis in EU, the models for further interests by the intellectual society upon environmental issues are also widely found out by world's public view. In this article we will discuss some of the available methods for bringing environmental justice, after we recall the theoretical background of this issue, besides paying a specific attention upon the differences and identical aspects between the federal state government model of USA and unitary state-governmental style of various nations. Following the praxis of USA and EU, the

† Corresponding author

need upon an amalgamated approach towards environmental health and justice was tried to be pictured. A more realistic platform for unitary states for the case of environmental justice was tried to be analyzed in this sense. Public health scenarios in realistic terms could be the rational way for applicable unitary state position of harmonization for environmental justice for short term steps (Schlosberg, 2007). Holistic policies without creating duality in local terms can be new hopes for the future of environmental justice in order to bring more satisfying health policies in a route of praxis.

## 2. THEORETICAL BACKGROUND OF ENVIRONMENTAL JUSTICE WHICH COVER THE PUBLIC HEALTH ISSUE

Famous philosopher Hippocrates, live in 5<sup>th</sup> century BC, also considered the environmental items in a wide scope. In this respect, human beings, animals and environmental items were flocked into one idea as “one unique sense of well-being” as health (Gracia and Koh, 2011). Apart from laying grounds for dualities, 17<sup>th</sup> century thinkers Giovanni Mairia Lancisi and 18<sup>th</sup> century thinkers Alexandre Parent-Duchâtelet and Louis Rene Villerme of industrial revolution, gave the idealistic defence of preservation of the environment for health by warning the public view upon the hazardous potential of losing natural environment's positive effects (La Berge, 1992). Then, it is easily stated that the background of political thought behind a holistic view for environmental health in politics was composed in 18<sup>th</sup> century for intellectual life (Güler, 1991). Following this, Rudolf Virchow and William Osler in 19<sup>th</sup> century from Germany, and James H Steele of USA in 20<sup>th</sup> century with his studies upon animals became great contributes for a rising discipline of environmental health.

Thinking the recent threats with epidemics such as Ebola, an isolated perspective towards health policies without the environmental items were not seen realistic any more. Today, environmental health is gradually becoming the core element of human health and even the animal health, recalling the other epidemics generating from other species. For the future of public issues in politics, the barriers between those disciplines should be destroyed, and isolation upon praxis has to be delayed. In literature, we see juxtaposed position in terminology for environmental and public health disciplines. Today we see the building of artificial environments owing to public policies or controls in local governmental level. Differently from the salt environmental protection movements, which focus on the preservation of natural environmental, today the creating of the environment was taken into attention in environmental health. In a wider scope, putting the need for environment in healthy position, we reach the understanding for environmental health today. Moreover in a global intellectual or political ground we catch some motives , for instance, The Vienna Declaration and Program of Action by UN Human Right High Commissioner responsibility did also emphasize the existence of social justice and its strong ties with public health after 1993.

Some series as “One World-One Health” in conference forms were also executed by William Karesh, Steve Osofsky and Robert Cook in recent decades. Early mentioned epidemics as Ebola, and some others as SARS, Nipah etc. with bird flu were mainly become base items for factors upon environmental deterioration results and, environmental health issue was described as the escape door to sustain the environmental justice for different zones of world. Overall, we can easily determine the weak approaches for environmental health, just degrading the issue upon the deterioration of ecosystems (One Health Initiative Official Web Site, 2016). Yet, the discipline as environmental health should promise a wider platform for holistic solution policies and structural difference to present ground for environmental justice in a sustainable and comprehensive manner.

The sub-branch of health policies as environmental health shows an identical relevance with public health. Natural environment and the described type of the available models upon human health were accepted as the study areas of the discipline. The artificial environment term, determined as the environmental profile created by human

constructions, along with the natural environment can be seen the input factors to assess the position of today's public health interactions. Urban transformations with environmental degradation have to be part of environmental health based headlines in the local development and planning files to gain a foresight for justice for common health. The weak point of this view shows itself through the inability of uniform type of regulation for all the available zones ([United States Federal HealthCare Center Official Web Site, 2016](#)). In this respect, the local conditions of zones could naturally be considered in detail mostly in federal states' position, via being able to create genuine regulations in local legislations.

Non-governmental organizations' parlance to awake public view upon environmental protection and public health was also part of this mentioned interdisciplinary outlook. United States' cultural public management and national governance praxis, being part of a huge local governance attitude in traditional manner, has made naturally this outlook a core item in local politics. Terms as livable neighborhood with natural environments or the electable environment, belonging to environmental health domain manifest themselves with their place in local government, and the motto as environmental preservation within the attitudes to rise consciousness in public awareness coincides with the identical status of environmental health and the protection in *practicum*. As is well known, while the environmental health is focusing on the natural and artificial environments for human health, the environmental preservation defends the protection of merely the natural environment for the sustainability of health of human beings and ecosystems ([United States Public Health Services Official Web Site, 2016](#)).

The domain of environmental health is the evaluation of physical, chemical and biological factors which threaten human health today, and the changing attitudes of humans were also under scope. Hence, along with a holistic outlook, the environmental factors being rallied by environmental factors are to be assessed for human health in this discipline's cover as well. The discussion upon the political topics' interaction are always realized in a wider cluster of domain, yet handling the issue as environmental health and justice separately is critical in scientific manner for social science. In this study we can also recall the topics for this discipline on the tittles as prevention of epidemics, creating an environment being proper to health conditions. On this way, we should also bear in mind that, the environmental health sub domains always go with the public health interests and instead of the national health and environment pursuits, mainly the local level approaches are more suitable to the problematic propositions in environmental health and its own praxis ([Flynn et al., 1994](#)).

In the descriptions given by World Health Organizations, the factors which affect the human health, paying attention on the rise of epidemics, are connected to the environmental conditions, and these kinds of collations present a theoretical bridge between health and environmental politics. The World Health Organization's office in European Union often gives the locution of environmental health, and describes the framework of itself as probing the pathological effects chemicals, radiation and some biological agents as well as the general physical, psychological girth, and the usage of social and cultural environment along with the urban development, land use and transportation issues. The field-frame of those global institutions give us an idea upon how the public output can be handled ([Cairncross and Feachem, 1993](#)). For example, pursuing the departments which implement the environmental health policies and supervising them are described by the World Wide Fund in the references made upon the state government. In addition to them, the motivation and inducement towards the environmental friendly technologies and attitudes are suggested by environmental policy making processes.

All the same, some theoretical border determination practices were benefited from the studies of other branches as environmental medicine. In this regard, those kinds of studies might replace with the environmental health premises in medical sciences in which the medical needs and pharmacological precautions were planned, mostly in European countries. Yet, for the sphere of social sciences, the usage of World Health Organization is on the same line with our descriptions for environmental health policies in environmental management regime.

### 3. ENVIRONMENTAL HEALTH CORE FACTORS IN ECONOMY

Overall thinking the disability adjusted life year evaluations, the losses about the ratios around 5 % to 10 % are realized because of the environmental reasons in European Union ([European Commission Official Web Site, 2016](#)). The recent data in the face of such a situation, being under the scope of environmental health policies, mostly refer to the threats on breathing such as the particles in the urban air at first ([Heagle \*et al.\*, 1973](#)). The air pollution which is a core item in artificial environment in an urban area can result in economical losses as seen in the example of DALY, and it supports the discussions upon why the environmental health policies have importance in public sphere and which reasons are head. And the approximate ratio as 5.7 % around 86 million for disability adjusted life year assessments keynotes the environmental causation within the environmental imposed sphere ([ECOS, 2016](#)). Besides the death ratio around 8.7 % and 4.9 million in number also emphasizes the same topic. Again we see in USA that the highly budgeted industrial areas created by various firms are released to the public view on account of neighborhood for environmental health based regards, and many issues as mutation, birth defects and the rise of cancer ratios goes with high statistics of DALY (i.e. disability adjusted life years being as a metric to measure the losses in economic life about the work force as well) in dramatic terms. Indeed, being not particular to USA, the work force was always presented with Gross Domestic Yield's elements in welfare eras ([Topuzoğlu, 1979](#)) then urbanization or long term planning skills was improved to use effectiveness in every country.

Many provinces which go with the differences in local governance between EU and USA can give us the disparity upon city planning, expropriation, local government units and the ties between second and third sectors in environmental health manners for realistic outputs in local politics. If we looked at the alternative example as USA, an effectiveness dummy can be applied via creating an understanding for the branches for toxicology and environmental health information programs, and benefiting from the power of governance a widely accessed platform can be suggested within those models. Indeed, USA example goes within this kind of model, remembered, there exists a local democratic governance ability and an integrated e-state facility between national medical library and local or national governmental units ([Stokols, 1992](#)). Today we see solid examples of local governmental actions within governance, redolent of TEHIP and TOXNET which are open databases upon toxicology and environmental health ([Wexler, 2001](#)). By the way, many technology friendly approaches support local governance today and the usage of geographic information systems are increased day by day. In this respect, another e-state facility as TOXMAP can give us a type of instance for GIS in USA again ([Hochstein and Szczur, 2006](#)). TOXMAP can be enviable upon giving a second generation of environmental health policies on geographic data sensitive technology, by giving services to support the praxis in this domain as well. Environmental Protection Agency and the citizens' ties can be established via those platforms. Moreover, the CERCLA package, which is an environment friendly development plan upon founding business fields, has served for chasing the highly budgeted basic research programs since 1980, along with the toxic emission inventories ([Watson, 1996](#)). Again an American safety fund was tried to be composed in ATSDR system in USA, and a mechanism on delegation and trusteeship system was tried to be executed in this scope in order to prevent the environmental deterioration by sustaining the utilization of local governments and societies, under the directorship of EPA ([Bruce \*et al.\*, 2000](#)). Extending those kinds of practices for publicly awareness and chasing can be promising for the future of governance in the domain of environmental health. The predicaments for unitary countries in terms of governance can be overcome by those praxis ([Mutlu, 2006](#)). For example, the case of USA gives us a more amalgamated politics in an alternate sample via more responsibility with autonomous budget.

### 3.1. A Federal Governmental Case through USA's Environmental Health

The discussion on environmental justice was mainly begun to serve for agenda before 1980s in US (Schlosberg, 2007). Today's interest upon this issue is both in a form of social movement and environmental law, along with the governance, planning, environmental politics for sustainability, political ecology besides the health issues. In American EPA's description, the orientation for individuals and institutions towards the environmental laws, without discrimination in race, color, gender, national origin and income level, was mainly emphasized. Herein a balanced way of attraction for the ruled sphere on the utilization from environmental facilities was discussed, and the way of local governance was taken into consideration. The environmental limiters which were taken into agenda with the headlines as pollution, the utilization from industrial facilities and even in the topics related with the crime levels, was tried to be planned in the politics. Today the differences across the unitary and federal governments under the bird's eye view make the USA's experiences and policy making process more precious today, in order that we can take lessons from even at the beginning of conceptual analysis. The position of minorities or the low-income groups, mainly sampled as Afro American settlements, are mainly the core injured party in those discussions. Again, there exist a way of local governance potential in politics which promises strategically. The dimension in which the low-income groups and differently ethnic based minorities reflect their indemnification on the effectiveness of environmental politics at first sight as well (Morello-Frosch *et al.*, 2002). This problematic case shows its identical status in the sphere of environmental health debates, covering the urban or local politics.

Thinking the output for governance we can easily catch the fair points with environmental justice's rising discipline. Justice, in particular, environmental one is about the fair treatment of people without discrimination. Today in federalist structures, those differences can show itself in harshness. Differences among the industrial aims of legislation procedures can deepen the unbalanced treatment across the citizens in federal countries. Some institutions, as previously stated like EPA example in USA can take precautionary steps against this unbalanced issue. In today's terminology and parlance the environmental justice issue is observed with the rate of the hazardous risks which threatens the health of citizens, yet the further discussion might cover the preservation or quality sphere for benefiting. The healthy environment descriptions of EPA simply go with the learning, working and living conditions' improvement (United States Environmental Protection Agency Official Website, 2016).

### 3.2. EU's Outlook for Broad Scanning

Precautionary policies were also added up with those environmental justice debates at EU's side. For example, David Vogel's model, which was described in his book titled as *Trading up*, gives us an outlook upon thinking the food, agriculture, air pollution, chemicals, consumer items and toxic emissions in a holistic ground (Vogel, 2009). Fed up with other agendas as GDO, hormone issue, mad cow epidemic, tobacco production and consumption, nuclear power, air pollution by vehicles, ozone layer depletion, climate change, foreshore preservation, biodiversity, chemicals, medical safety, terror, risk management and information systems' integration, those interdisciplinary argue are widened (Wakefield, 2001). As to Vogel, GDO, mad cow, animal feeding, the usage of antibiotics, climate change, chemicals, electronic wastes, cosmetics have composed the characteristics of European Union for the period after 1990s upon the environmental public health. Among the mentioned topics, the level of awareness shows itself for air pollution issue thinking the differences between American public view and EU's perspective. Indeed, American citizens are relatively more ready to take risks via using motor vehicles, paying less attention towards the risks of air pollution, which could be referred among the more risky technologies.

### 3.3. A Methodological Study across the Positions of Federal and Unitary States

Along with the approaches were developed upon handling the governance issue upon environmental politics, we can also have a close look upon the position of federal versus unitary states about the carbon emission rates per capita. As is pictured in political ideals, local governance channels might be used for the future of environmental precautions. When we look at the available position taken by the WHO data in 2010 for G20 countries we detect the picture below for carbon emissions ([Washingtonpost Online Newspaper, 2016](#)).

If we look at the members of G20 we will meet 10 unitary and 10 federal members. Different federal state types as monarchies or republican types were out of interests, as the local governance capability of the federal systems was tried to be followed in this analysis. In hypothesis the defense, i.e. the federal systems with local governance superiority are superior to unitary ones in terms of environmental protection steps are tried to be enlightened.

**Table-1.** Carbon emission rates per capita ([World Health Organization Official Web Site, 2015](#))

Governmental System	Country Name	Carbon Emissions Per capita 2010
Federal	USA	17,56
Unitary	TURKEY	4,13
Unitary	UK	7,86
Unitary	JAPAN	9,19
Federal	CANADA	14,68
Federal	GERMANY	9,12
Unitary	France	5,56
Unitary	Italy	6,85
Federal	Russia	12,23
Federal	Australia	16,93
Federal	Brazil	2,15
Federal	Argentina	4,47
Federal	India	1,67
Unitary	China	6,2
Unitary	Indonesia	1,8
Federal	Mexico	3,76
Unitary	Saudi Arabia	17,04
Unitary	South Africa	9,04
Unitary	South Korea	11,49
Federal	European Union	7,35

Source: WHOOWS (2015)

In order to understand, whether there exist a meaningful difference between the unitary governmental systems and the federal governance style, we can make a brief evaluation in this respect. In order to understand the situation if there is a difference in the carbon emission rates of unitary and federal governments, we can apply Mann-Whitney U test here. Using SPSS.22 software, we can get those following statements for those data above:



### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of CarbonEmissionPerCapita is the same across categories of Type.	Independent-Samples Mann-Whitney U Test	,853 <sup>1</sup>	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

<sup>1</sup>Exact significance is displayed for this test.

Figure-1. Hypothesis Test Summary for the distribution of CO2 emission percapita

Source: Green and Salkind (2010)

As is the significance level is above the value deadline as 0,05, so there is no meaningful result for the test application with the value of significance as 0,853. It means that the distribution of carbon emission per capita rates can be under the same way within the unitary of federal types. Hence the null hypothesis cannot be rejected. Indeed, we can also look at the shape of the distributions below:

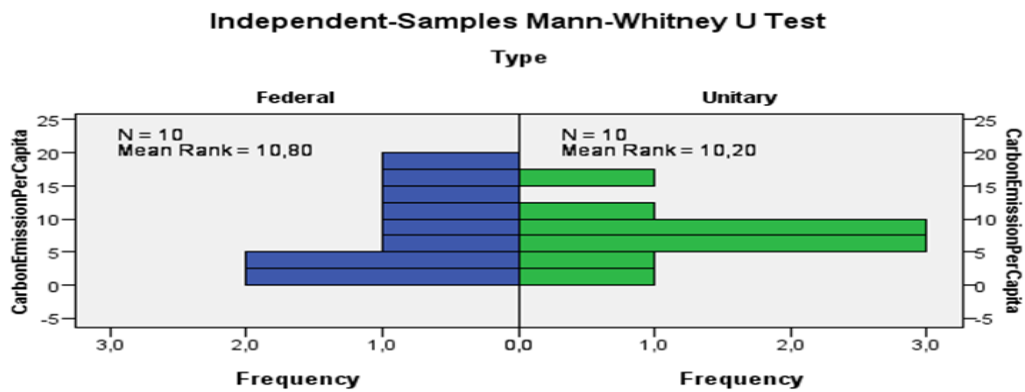


Figure-2. Independent Samples Mann-Whitney U Test CO2 emission percapita

Resource: Mann and Whitney (1947)

As is also seen above, the distributions doesn't resemble to each other too much. If we look at the median values

<b>Total N</b>	20
<b>Mann-Whitney U</b>	47,000
<b>Wilcoxon W</b>	102,000
<b>Test Statistic</b>	47,000
<b>Standard Error</b>	13,229
<b>Standardized Test Statistic</b>	-,227
<b>Asymptotic Sig. (2-sided test)</b>	,821
<b>Exact Sig. (2-sided test)</b>	,853

Report	
Median	
Type	CarbonEmissionPerCapita
Federal	8,23300
Unitary	7,35850
Total	7,60700

Figure-3. Statistics for distribution of CO2 emission percapita

Resource: Mann and Whitney (1947)

Now it can easily be determined here that local governance facilities' improvements for environmental steps in the samples for federal governance capabilities doesn't show itself in one of the most important reflections, i.e. carbon emission rates. Many promising steps can be obtained through the structural awareness for environmental issues; again it was not seen in today's praxis yet. Higher mean and median levels for federal countries can be interpreted for the local demands dominance for the usage of technologically attractive but environmentally risky facilities among the citizens. A type of global measure for environmental conservation metrics as carbon emission also shows the available situation, portrayed as the gap between policies created upon the local environmental justice based aims and the global ones in that manner.

If we look at the picture through the DALY rates for G20 countries, we will meet below table (WHOOWS, 2015):

Table-2. DALY rates for G-20 groups

Government Type	Name	DALY rates per 100000 population
Federal	USA	22775
Unitary	TURKEY	29027
Unitary	UK	20376
Unitary	JAPAN	15700
Federal	CANADA	18838
Federal	GERMANY	19224
Unitary	France	19104
Unitary	Italy	16957
Federal	Russia	39906
Federal	Australia	19763
Federal	Brazil	31632
Federal	Argentina	26808
Federal	India	47950
Unitary	China	24811
Unitary	Indonesia	36015
Federal	Mexico	26763
Unitary	Saudi Arabia	27174
Unitary	South Africa	67514
Unitary	South Korea	17621
Federal	EuropeanUnion(average)	21919

Source: WHOOWS (2015)

Then, the question upon the Mann Whitney u test based analysis can be created upon the possible difference between the local governance superior federal system and the unitary ones in G-20 countries. As is seen below no significance is caught with the ratio as 0,529.



**Hypothesis Test Summary**

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of DALY is the same across categories of Type	Independent-Samples Mann-Whitney U Test	,529	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.  
<sup>1</sup>Exact significance is displayed for this test.

Figure-4. Hypothesis Test Summary for DALY distribution  
 Resource: Mann and Whitney (1947)

If we look at the distribution we see a similar distribution pattern as is seen below. In carbon emission case, different structural bases for economies could be responsible for different ranks, but herein, mostly the similar GDPs or legal texts with insurance could be commented for the similar groupings in distribution. Hence, apart from a separated part, the distributions are clearly similar to each other. Indeed, this position of results show that the local governance facilities don't show a structural solution for the life quality, which could be easily affected by the low environmental facilities. The median as 24769 for federal states and 22593 for unitary states are quite near to each other.

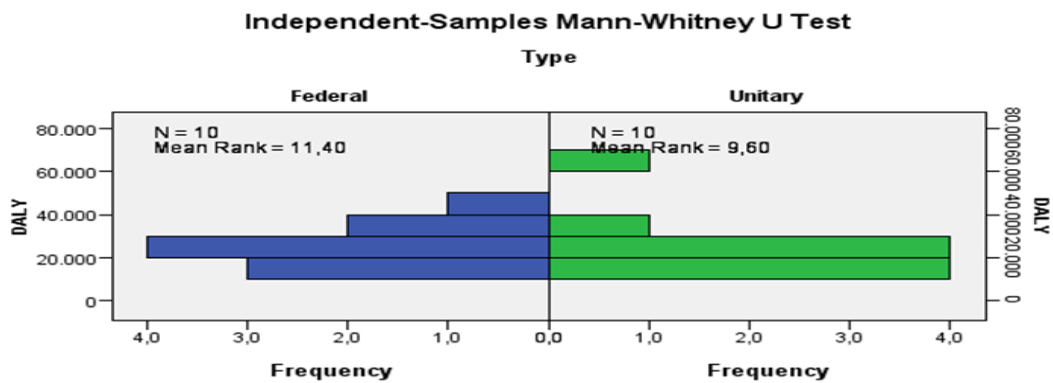


Figure-5. Independent Samples Mann-Whitney U Test for DALY  
 Resource: Mann and Whitney (1947)

When we look at the general results for this step below,

<b>Total N</b>	20
<b>Mann-Whitney U</b>	41,000
<b>Wilcoxon W</b>	96,000
<b>Test Statistic</b>	41,000
<b>Standard Error</b>	13,229
<b>Standardized Test Statistic</b>	-,680
<b>Asymptotic Sig. (2-sided test)</b>	,496
<b>Exact Sig. (2-sided test)</b>	,529

Figure-6. DALY statistics  
 Resource: Mann and Whitney (1947)

We can easily catch the exact significance ratio as 0,529, which is higher again the 0,05, and no meaningful difference between the distributions can be interpreted for different local governance praxis on behalf of the mechanisms or by the level of governmental systems again.

In DALY evaluations for politics, the specific needs for different sectors of different zones can be assessed by local governmental mechanisms in a fairer manner. DALY based politics go with the solution giver understandings and it is highly convenient to improve demand systems. Hitherto situation in which the federal system's advantages can't show their superiority in problem solving can be reversed by the rise of publicly awake societies at local who demand higher standards in environmental sense.

### 3.4. In a Comparative Outlook through Country Examples in G-20

As we previously discussed, carbon emission rates is a strong data to see overall picture to shape politics about public health. Carbon emission rate's mutual factorial base with work force potential in professional life and the reflections for air quality in daily lives of citizens take the all attention onto its own side.

In respective, view going through the benefited data set shown in World Health Organization's official web site, we can easily pick up which state among the G-20 group is the most emission responsible. According to the collected data which was collected by countries, USA was the first rank emission record responsible among the period between the years 1950 and 2007. In the first two decades which go parallel with the early emancipation of EU between 1950 and 1970, USA being a federalist country and Germany being another federalist one took the first two ranks. It shows us that federalism could be fewer controllers upon the environmental care ([WHOOWS, 2015](#)).

When we came to 1980 China became the second rank country in the huge carbon emissions with 406.98 million metric tons. China is unitary country with strict rules, but the environmental justice issue is far way in 1980s newly development politics of China with a huge population. In 1980, Germany is the number third. In 1990 the picture was revised with the new comer for third rank as Japan. Japan is a unitary government just as the China. In 1990s picture, the unitary style of governance shows its strictness in countries' development motivations. If we discussed today the effectiveness of federalism upon environmental justice, it could be simply because of the rising public view which was supported by democratic praxis. In 2000 we see Russia in the third rank being another federalist structure, then in the first three rank we again began to see two federalist one unitary countries. Being around the beginning of the decade in which we exist today, as 2010, China has become the number one carbon emission leader country ([WON, 2016](#)). Today India, being another federalist structure takes the third rank.

Among the G-20 group, we can picture another portrayal for less developed countries in relatively shaped outlooks. For example Turkey took 16<sup>th</sup> rank in 1950 and 1960, 17<sup>th</sup> in 1970 & 1980, and 1990; but 18<sup>th</sup> in 2000s and around 2010. Although its emission rates were multiplied with 40 in 60 years, coming from 2,59 million metric ton towards 78 million metric ton all around. Again Turkey's position being a unitary government among G-20 group is unique ([WON, 2016](#)). As is seen clearly and compared with Germany, Turkey has a different profile with low GDP rates, but in political sense it was out of the European Union integration sphere. Thinking the decreasing ranks of Germany, we should also recall the sanctions of EU legislation upon Germany about the environmental and healthcare. Turkey's developing era, which could be dated with the period after 2000s were the same years with the newly gained position status for membership associations, then the relatively more stable position of Turkey in the order could be resulted from the precautionary color of the environmental care politics. France's position being in the membership owner group for EU in G-20 show the dramatic difference with Turkey, via France's own changing position 60 years from the 4<sup>th</sup> rank towards the 16<sup>th</sup> of these days, yet France is also another unitary government. Unitary governments' obedience in advantage for reformist rules, which can cover environmental or

healthcare steps, can show itself in a supranational entity's existence. Indeed, federal governments' step for the road of environmental justice is mostly fed up with the public view or democratic governance.

#### 4. CONCLUSION

As we fairly understood the main frame for the ability of local governance in environmental policy praxis, we might also have an idea about the future. Thinking different governmental practices we can keep our hopes upon local governance praxis can be a strong solution environmental justice issues, which creates mainly nationally balanced environmental policies. On the other hand some global approaches in the reflections of the environmental protection, upon for example decreasing the air pollution, which can be measured by the carbon emissions, cannot be easily supported by the governance effectiveness yet. Besides, the amalgamated areas which could be followed by the DALY statistics today cannot also be easily observed for the improvements about the future of the holistic praxis of health and environmental politics today.

Federal assemblies can be helped by the local ones on this road, and we can catch some positive examples upon the fuel taxes in USA today in state level metrics, yet these steps are not adequate to show a difference on behalf of the marathon as local governance. However, thinking the positive developments by evaluating the improving positions of injured minorities because of the low-quality environmental conditions' changing, local governance power can present itself to make the voice of the needs louder.

Today, many federal government are mainly following one type of tax ratios in environmental arena, as we see the Germany case having 95 % only federal tax regulation patterns, this picture might be changed in the picture. This kind of a development can be explained by the evolution of the conceptual journey upon environmental justice again. Today at the local level, environmental justice is sought for the equality across the citizens. Maybe in the future the environmental justice issue across the states or the countries are started to be explored more rigidly, then the local governments in a contest could raise the bar for environmental quality or macro scale justice within the facilities or healthier conditions, in a type of awareness where the demands for a better life can speak by itself.

The right to economic improvements has to meet in order to treat equitably the needs of future plans. Today a more developed environmental justice understanding recognizes that toxic substances and waste bring us a serious threat as to the views for human rights to life and health of human beings. Everyone in global platforms has simply the right to use the benefits of scientific progress and its applications. Yet it has to be recalled here that new advances, mainly in the biology, medicine, safe technology and life sciences as well as in information technology, may have potentially bad results for human rights. Further discussion or analysis by means of comparative views is mostly needed in intellectual arena to assess the promising status of environmental justice.

Our study was shaped in order that the justice factor is highly related with the governmental positions. In the realistic terms for the future of environmental care is bound to the promising power of governance. USA's environmental justice discussions in politics and unitary states advantages in reformist views should be assessed in a role play model for all countries in global arena. As is mentioned above, supranational bodies can be shown in a more practically effective status in terms of giving and getting applied the directives. On the hand, the citizen or particularly voter based structures might be used for higher potential for the future of environmental health issue, thinking the problem determination, capitalistic needs as work force conditions, social awareness and reactionary social psychology, then in near future it might be simply considered the core of rising juxtaposed position of justice and environment in people's mind.

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