

# **ASSESSMENT OF INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC21) IN TERMS OF OBJECTIVES AND CONCLUSIONS**

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## **Abstract**

*Climate changes occurring as a result of global warming are the main current problems that humankind should overcome. The mass deaths or regional conflicts caused by the heat waves are among the events the examples of which are often seen in our day. It is not possible for any individuals, institutions or countries to isolate themselves from solution-oriented efforts because of occurring on a same global ground. Intergovernmental Panel on Climate Change (IPCC21) which was held in Paris during the period of 30 November-11 December 2015 is an initiative on a global scale developed to find solution to the problem and has taken the issue from the discourse dimension and brought it to action ground. However, it should not be forgotten that the solution for such an important global problem can be achieved through the attribution of the issue to the local and the adoption of it by individuals.*

*Keywords: IPCC21, Global Cooperation, Development, Environment Management*

## **INTRODUCTION**

In the development process, humankind has significantly improved especially since the Industrial Revolution. However, this process has led to some risks that threaten the global life today. The environmental problems, the precaution dimension of which has been neglected, are among the main problems for which communities in our age should find solutions. In other words, the development in question for some communities has turned into a price that should be paid by all communities of today because of occurring on a same global ground.

However, the fact that humankind has achieved an environmentally-conscious mental maturity has been possible unfortunately by the increase of risks which threaten people's living spaces in addition to accumulation of knowledge. Today, the efforts of non-governmental organizations that are from the science, art and culture environments of businesses to prevent environmental problems have increased.

In this context, Intergovernmental Panel On Climate Change (Intergovernmental Panel On Climate Change, IPCC21) which was held in Paris between November 30 - December 11, 2015 is important for the implementation of Framework Convention on Climate Change (United Nations Framework Convention on Climate Change, UNFCCC) adopted by United Nations in Rio de Janeiro, Brazil in 1992. Intergovernmental Panel on Climate Change (IPCC) was founded in 1988 by World Meteorological Organization (WMO) operating under the United Nations and United Nations Environment Programme (UNEP), and its main purpose is to assess the available scientific, technical and socio-economic information and studies regarding the climate change and to give global actors a lead to find solutions to the problems occurring as a result of climate change. Although numerous panel discussions have been organized until today, the first one of which was in 1979, in order to implement the convention in question, satisfactory results for solutions could have been achieved. On the one hand the desire for economic growth and on the other hand the perception that environmental awareness prevents development have led participants especially in developing countries to be in a dilemma. In this article, the twenty-first Panel on Climate Change will be assessed within the frame of objectives and conclusions.

## **DEVELOPMENT OF TWENTY-FIRST INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC21)**

The experience of industrialized countries has demonstrated that the economic growth is not enough alone and the protection of environmental values, especially natural resources is important. The degradations in the ecosystem have increased at the level to pose risk for human life in our day. According to report published by the National Institute of Health and Medical Research (INSERM) as a result of their studies in 16 European countries, more than 70,000 people lost their lives in Europe due to extreme temperatures experienced during the summer months in 2003. 45,000 of these deaths occurred only in August. In the ranking of countries, France with 19,490 people and Italy with 20,089 people are in the lead (See: AFP and Reuters (2007), "La canicule de l'été 2003 a fait plus de 70 000 morts en Europe, selon l'Inserm"). This situation requires that the issue should be addressed at the global level for the solution and imposes responsibility for international organizations that direct the global economy.

### **Problem of Climate Change and Need for Global Cooperation**

The purpose of the World Bank (International Bank for Reconstruction and Development, IBRD) which was established after the Second World War and which is one of the three main institutions was primarily to dress the wounds caused by the war and then to develop financial resources for the projects that would enable Third World countries to be able to get rid of the spiral of underdevelopment. Environmental awareness has been one of the activities of the World Bank although it has not been one of the main objectives of it. Today, they provide source of financing for the projects regarding climate change and environmental safety. When the distribution of the projects for which source of financing was supplied by the World Bank is analyzed, East Asia and Pacific (245 projects), Latin America and the Caribbean (202 projects) and Africa (200 projects) are the foremost regions. China (104 projects), India (53 projects), Mexico (38 projects) are among the leading countries. Governments and non-governmental organizations became interested in the issue in the later years. The Club of Rome formed with the participation of different circles in 1968 was the first of the steps drawing attention to the relationship between development and the environment. In the report of the Club of Rome published in 1972, it was emphasized that the economic development should be slowed down or ceased to protect and develop the environment. In report entitled as "The Limits to Growth" prepared by Dennis and Donella Meadows from MIT, attention was drawn to the fact that natural resources become scarce despite the increasing trend of the world population, so the current environment will lose its live able characteristics in the near future. The publication of the report corresponds to the same year with The United Nations Conference on the Human Environment in Stockholm. It was named as the first Earth Summit and repeated in the subsequent every ten years including 1982, 1992, 2002 and 2012.

### **Development Process of Twenty-First Intergovernmental Panel on Climate Change (IPCC21)**

The fact that Declaration on Human Environment was accepted by the participating countries in the conference organized by the United Nations in Stockholm in 1972 has increased the interest of individuals and institutions on the environment. While the connection between the development and ecological environment was put forward during Stockholm conference, the concept of "sustainable development" was included in Brundtland report entitled as "Our Common Future", which was prepared by World Commission on Environment and Development, for the first time in 1987. In the report in question, sustainable development was defined as "the development that meets today's needs without compromising the ability of meeting the needs of future generations" and accepted by the relevant circles. It was stated in

the report that environmental problems on a global scale largely resulted from poverty in the Southern Hemisphere and from unsustainable consumption styles in the Northern Hemisphere. Furthermore, the opinion that it is necessary to enter into a long-term period of growth that will provide restructuring was included based on the assumption that economic growth can be realized by an environmentally friendly point of view.

United Nations Framework Convention on Climate Change (UNFCCC) was adopted by the governments in the conference on environment and development which was held in Rio city of Brazil in 1992 and entered into force in 1994. Signatories of the United Nations Framework Convention on Climate Change accepted the existence of human-induced climate change and imposed the primary responsibility in dealing with this problem to the industrialized countries. The said convention aiming to reduce the ratio of gases that cause greenhouse effect released into the atmosphere due to human-induced activities or minimize their damages is the most important example of cooperation regarding the problem. Although it regulated the basic principles, action plans and sanctions regarding the issue, it had no sanction power because the support of contracting parties remained at good faith level.

Today, there are a great number of organizations aiming to create public opinion and develop solutions regarding the negative consequences of climate change. Although these national or international organizations strive in accordance with their objectives, they do not have a large influence area. Intergovernmental Panel on Climate Change (IPCC) is the principle organ of The United Nations Framework Convention on Climate Change (CCNUCC) which was adopted in Rio in 1992 on a global scale. The first of these conferences dealing with the global warming-induced climate change (IPCC1) was held in Berlin in 1995, however some developments were made before the conference in question. Global Climate Research Program was accepted in 1979 in the global climate conference which was in Geneva, Switzerland, and intergovernmental group of experts on climate change (GIEC) was created in 1988. The global cooperation process that took place before the Twenty-First Intergovernmental Panel on Climate Change is shown briefly in Table 1.

Table 1. Important dates in the Global Cooperation before IPCC21

Date	Country-City	Subject
1995	GERMANY-Berlin	IPCC1: The first conference of the parties
1996	SWITZERLAND-Geneva	IPCC2: The establishment of the secretariat of The United Nations Convention on Climate Change Environment (CCNUCC).
1997	JAPAN-Kyoto	IPCC3: The adoption of the Kyoto Protocol formally.
1998	ARGENTINA -Buenos Aires	IPCC4: Determination of the Activity Plan.
1999	GERMANY –Bon	IPCC5: Acceptance of the Action Plan.

2000	NETHERLANDS-Hague	IPCC6
2001	MOROCCO-Marrakech	IPCC7: The publication of the third report of intergovernmental expert group (GIEC) on climate change. Acceptance of the Marrakech Accords including the details of the implementation of the Kyoto Protocol.
2002	INDIA-New Delhi	IPCC8
2003	ITALY-Milano	IPCC9
2004	ARGENTINA -Buenos Aires	IPCC10
2005	CANADA –Montreal	IPCC11/MOP1: The implementation of the Kyoto Protocol. The first meeting of the Parties to the Kyoto Protocol (English equivalent MOP1).
2006	KENYA-Nairobi	IPCC12/MOP2: Acceptance of the Nairobi Action Program.
2007	INDONESIA-Bali	IPCC13/MOP3: The publication of the fourth report of intergovernmental expert group (GIEC) on climate change. Presenting the road maps of the countries.
2008	POLAND –Poznan	IPCC15/MOP4
2009	DENMARK-Copenhagen	IPCC15/MOP5: Writing the Copenhagen Accord. Target of limiting global warming to 2 degrees.
2010	MEXICO-Cancun	IPCC16/MOP6: Writing and widely acceptance of the Cancun agreements. Establishment of institutions for climate similar to green fund.
2011	SOUTH AFRICA -Durban	IPCC17: Acceptance of the Durban Platform, which was written for the strengthening of activities.
2012	QATAR –Doha	IPCC18: Acceptance of secondary liabilities related to the Kyoto Protocol.
2013	POLAND – Warsaw	IPCC19: COP21 was decided to be held in France.
2014	PERU-Lima	IPCC20
2015	FRANCE –Paris	IPCC21

Source: UNFCCC, <http://unfccc.int>, [www.cop21.gouv.fr](http://www.cop21.gouv.fr), T.R. Ministry of Foreign Affairs:

[www.mfa.gov.tr](http://www.mfa.gov.tr), Access: 28.01.2016

As it is seen in Table, each of the conference held in different countries has fulfilled a different function in the process since 1995. For example, the conference held in 1995 in Berlin, Germany is important in terms of the fact that it brought together participants for the first time and the climate researches on a global scale were initiated.

IPCC3 held in Kyoto, Japan in 1997 is important as it set objectives. In Kyoto, the protocol of reducing the ratio of greenhouse gases in the atmosphere was signed, industrialized countries guaranteed a reduction of greenhouse gases they released into the atmosphere by 5% between 2008-2012 (later, this period was extended until 2020). Although this convention was an achievement, its objective was not materialized and a text compelling all countries was not published.

In the Intergovernmental Panel on Climate Change (IPCC17) held in Durban, South Africa in 2011, it was decided to hold an exceptional size conference in Paris in 2015. In line

with this decision, the 21st Intergovernmental Panel on Climate Change held in Paris between the dates of November 30-December 11, 2015 is different from the previous ones in terms of objectives and conclusions.

## **ASSESSMENT OF INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE IN TERMS OF OBJECTIVES AND CONCLUSIONS**

Problems that occurred or are likely to occur depending on climate change are considered as one of the consequences of the economic development process. Therefore, one of the main issues discussed in the twenty-first intergovernmental panel on climate change was how the growth achieved in the world economy could be limited.

### **Assessment of Twenty-First Intergovernmental Panel on Climate Change (IPCC 21) in Terms of Objectives**

The opinion that greenhouse gases released into the atmosphere are the consequence of economic development and lead to climate change by global warming has no longer been a subject of debate today. Because it was observed that the ratio of greenhouse gases in the atmosphere quickly increased in the periods in which the global economy achieved growth and slowed down in the reduction periods in which crises were experienced. This situation revealed that the economic development dimension of the problem should not be ignored while determining objectives for the prevention of climate change.

Economic development is addressed as the opposite of backwardness or underdevelopment and represents a long process including the development moves. When it is discussed in the widest sense, the philosophy of development expressing the positive progress is based upon the perception of the world in the ideal of the person. "The human who wants to make his potential power a reality is changing the world and development grows out of this" (Furtado, 1970: 93). When a country's economy is concerned, the economic development that can be measured by the increase in the production amount or GDP per capita represents a process containing other concepts in the long term including social and cultural concepts. In other words, the process of structural change that occurs in the social, cultural and political fields in addition to the production and income growth in the economy is defined as economic development. Perroux defined the economic development, which is initially perceived as the increase in income per capita, as "the whole of mental and social changes experienced by a community in an accumulative and sustainable way"(Perroux, 1965:155).

In definitions made in terms of anthropology, attention is drawn to human's dimension which has no peace with the environment and is often at war. This aspect makes it possible for human

who wants to make his potential power a reality to damage the environment in which he lives while changing the world. From the problems that has occurred as a result of the process continued since the industrial revolution, risks occurring for today's and future generations have began to cause humankind feel anxiety since 1970s.

Climate changes have occurred by the temperature increases occurring especially as a result of human activities in the process of economic development. The hottest period since 1850 was experienced in the last thirty years, the temperature was higher than the previous period in every ten years in this period. 2001-2010 period was one of the hottest days experienced since 1850. On the other hand, while the numbers of cold days and nights observed throughout the year since 1950 decreased, the numbers of hot days and nights increased. The increased heat waves have emerged in Europe, Asia and some parts of Australia (GIEC, 2014).

### **Assessment of Twenty-First Intergovernmental Panel on Climate Change (IPCC 21) in Terms of Conclusions**

The twenty-first of the Intergovernmental Panel on Climate Change brought together about five thousand civil society organizations and investors from 195 countries. Great numbers of companies and institutions on the national or international scale shared the decree for the solution set out by signing the letter of agreement in December 12, 2015.

Paris Agreement is an important consensus at a global scale based on the liability of 187 countries consisting of 29 items containing 140 decisions (Nations Unies, 2015: 4). Generally, it can be said that the letter of agreement is assertive and has brought a dynamic structure to the process. Because it aims to limit the global warming to 2 degrees and to reduce the limit to 1.5 degree as from the second half of the century. On the other hand, it includes the rearrangement of obligations by revising in every five years from 2023. A flexible implementation which is transparent in the fulfillment of the obligations but takes into account capacity of the countries has been envisaged. How the process will function after 2015 is shown in Table 2.

Table 2. Next Stages of the Paris Agreement Arranged within the frame of IPCC 21

<b>Year</b>	<b>OBJECTIVE</b>
2018	The first appointment to discuss the progress towards the objectives.
2020	Rearrangement of the national obligations.
2023	The first financial statement of Paris Agreement.
2025	Determination of the new requirements for the reduction of greenhouse gases.
2050	Sudden decrease in greenhouse gases in the second half of the twenty-first century.
2100	Aiming to keep global warming under 2 degree and to reduce it to 1.5 degree in the future.

Source: [www.gouvernement.fr](http://www.gouvernement.fr)



As it can be seen from the table, IPCC21 concluded the studies that have been carried out on climate change until today by agreement in the manner it would impose obligations for the governments of 195 countries, nongovernmental organizations and international institutions. The process is important in terms of the fact that it recorded the significant efforts made in the past and determined a road map for the future, although its operation as it is foreseen depends on the realization of certain conditions.

French Foreign Minister Laurent Fabius who will continue to hold the presidency of Intergovernmental Panel on Climate Change (IPCC21) until 2016 has expressed the advantages of the agreement in question by 4P. These are; first: *Processus* (process), Second: *Précision* (Emphasis), Third: *Prés 2020* (the period before 2020) and the fourth: *Préparation* (preparation) (Parlement européen, 2016). In this regard, it is necessary to emphasize some features Paris Agreement:

- *Process*: Paris Agreement which will be opened for signature in New York as from April 22 is foreseen to be signed by 55 countries responsible for 55% of the greenhouse gases released into the atmosphere.

- *Principles and objectives*: Paris Agreement has the characteristics of being a text in which principles and objectives that form the basis of future stages of the process are defined. The agreement reached has approached the participating countries' action plans for preventing global warming presented by them before the conference to the objective for keeping global warming below 2 degrees. The principle of common but different responsibilities was adopted because of the different economic development levels of the participating countries. While developed countries were obliged to make a financial contribution, the voluntary basis was introduced for developing countries.

- *Infrastructure*: Paris Agreement has been foreseen to enter into force as from 2020 and includes Lima-Paris Action Plan that brings together governments and non-governmental organizations. Accordingly, countries will cooperate on issues such as the development of technologies sensitive to the natural environment, investments in early warning systems against natural disasters, risk insurance and extending the systems based on solar energy, and the progress on these issues will be monitored. For this purpose, developed countries will provide a support of 100 billion dollars every year until 2025 in which a new common plan will be determined.

- *Continuity*: Paris Agreement also contains the preparations that need to be done for the panel on climate change which will be held in Marrakech city of Morocco at the end of 2016. The similar efforts made for IPCC21 before the beginning will also be performed for IPCC22.



Paris Agreement will be a pressure factor on people and institutions that have a voice in the global economy and politics for the realization of the discourses put forward. However, IPCC21 includes some concerns about the implementation of the action plan it put forward. It is possible to express briefly the contradictions reflected in the agreement within the context of objectives and means in particular:

- The agreement proposes keeping global warming below 2 degrees by aiming 1.5 degrees, and redefining the obligations assumed by the countries according to the financial statement to be achieved in 2023 to achieve this. However, some foundations and scientists expert on the subject suggest that seizing the objective of 1.5 degree would not be possible by the obligations in question.

-Although participating countries agreed on keeping the amount of CO<sub>2</sub> released into the atmosphere at the level of 55 billion tons in 2030, The Intergovernmental Group of Experts on Climate Change (GIEC) suggest that this amount should be 40 billion tons to keep the global warming below 2 degrees. It is expected that more than half of the electrical energy in the world will be provided from renewable sources as from 2030. However, the fact that coal plants that lead to great environmental pollutions will continue to be used will lose the speed of the measures taken. International Energy Agency (IEA) shares the opinion that the increase of CO<sub>2</sub> that has greenhouse effect in the atmosphere and of other gases will also continue after 2030 depending on the energy production and use even if the words in Paris Agreement are kept.

-The agreement proposes that industrialized countries will provide financial support to developing countries that will have difficulty in meeting their obligations in the process of reducing gas with greenhouse effects in the atmosphere. The contribution other countries to the funds is based on a voluntary basis. This situation leads to the risk of disapproval of the letter of agreement by some of the participating countries during the approval process. For this reason, the support of 100 billion dollars foreseen for developing countries to use after 2020 was removed from the letter of agreement and included in the annexes section(Vey, 2015).

- Although the issue of compensation for damages and losses incurred as a result of climate change has been intensely brought into the agenda by developing countries, it was not included in the agreement text and remained in the annexes section. Accordingly, it seems that it is not possible to file a claim for compensation because of changes occurring as a result of global warming such as extreme drought and heat waves. The negotiation process demonstrated that the issue of compensation is likely to remain in the focus of discussions until all countries begin to use renewable energy sources (Cherki and Vey, 2015).

## CONCLUSION

Today, the problem of climate change occurring due to global warming has progressed to become the main problem of institutions and organizations on a global scale, nongovernmental organizations and individuals. In this context, Intergovernmental Conference on Climate Change (IPCC) has been organized every year since 1995, and its conclusions vary from year to year. In the third of the conferences (IPCC3) which was held in Japan in 1997, a historical result was obtained by the fact that the Kyoto Protocol was signed, however the fifth one (IPCC15) which was held in Denmark in 2009 could not fulfill the expectations. The opinion that the solutions proposed posed obstacles for the economic development lies at the bottom of the fact that results that can meet the expectations could not have been obtained in Climate Change Conferences so far. This situation slowed down the formation of consciousness at the individual and institutional levels especially in developing countries and prevented the important steps that should be taken. In the process of the preparation of the text of Paris Agreement, African countries disclosed together their opinion that they were the victim of development.

On the other hand, the countries in question demand financial help in return for being able to remain more susceptible to the ecosystem and reducing the scale of growth. The perception that the industrialization experiences of today's developed countries play role in the climate change arising from the global warming has strengthened the said approaches of developing countries.

The twenty-first Intergovernmental Conference on Climate Change (IPCC21) is important in terms of putting forward a concrete agreement text for the solution. However, the agreement reached poses uncertainty about the applicability of the decree put forward. Countries reported the amount of CO<sub>2</sub> they foresaw to reduce in the future to the United Nations in 2015, however their warranties fall behind the economic growth objectives. For example, it is estimated that the economy of USA that guaranteed to reduce the amount of CO<sub>2</sub> released into the atmosphere by 26-28% until 2025 compared to that of in 2005 will expand by one third in this process. According to the International Energy Agency, approximately 88% increase in global GDP and approximately 8% increase in energy sources will have occurred by 2030 compared to that of today. The temperature increase is estimated to be 2.6 degrees in 2100 due to the activities of plants working with solid fuels such as coal despite the increasing renewable resources in energy production. It is necessary to include measures such as ensuring efficiency in the energy production and utilization process, increasing the investments in green energy technologies and the removal of subsidies for fossil fuels in order to reduce the amount of carbon in the atmosphere.

At the end of the twenty-first Conference on Climate Change (IPCC21), the problem of climate change has gone beyond the discourse dimension. Countries, international organizations, those who have a voice in world politics and economy have understood the importance of the problem. However, the adaptation of common understanding at the individuals level is also important as well as the need for financial resources for the implementation of the principles introduced by the Paris Agreement. Solution proposals will provide humankind with living spaces that does not disrupt ecosystems where environmental safety is ensured in the event that the problem becomes localized by going down to the national, regional and urban scale.

On the other hand, societies have to take the process of energy production and consumption into consideration when they make economical, sociological, and cultural layouts. Governments have to give way more activities such as decreasing of traditional energy sources such as oil, improving the current energy systems and developing new energy resources. As a result, attributing the climate change by the researchers coming from different fields such as science-technology, economics and politics will elicit the successful implementation of the decision made after the 21st Conference on Climate Change, IPCC21.

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