





An Examination of Sustainability and United Nations Sustainable Development Goals: Turkey Case

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Abstract. This study focuses on international summits which have defined the framework of sustainability, and which have played an important role in the emergence and development of the concepts, sustainability and sustainable development in the recent past. The paper concentrates on the effects of international summits between the United Nations Conference on the Human Environment (1972) and HABITAT III (2016) (Quito), which can be defined as milestones. Furthermore it explores the developments in Turkey with respect to the selected indicators for sustainable development goals and the process of achieving such goals that are identified in a global scale in the 2015 United Nations (UN) Sustainable Development Summit.

Keywords: Environment · Sustainability · Sustainable development
United Nations (UN) · Sustainable development goals

1 Introduction

Nature and natural resources have been considered as infinite assets since the very beginning of the human history. Increased consumption of natural resources with the emergence of the concepts of industrialization and colonialism has led to environmental problems. These environmental problems have proved that natural resources, which are very important for the existence of human race, are finite, and are under threat due to excessive use. Locally enforced measures aimed at environmental protection date back to very old times. Nevertheless, as environment is an entity which belongs to the humanity as a whole, it was comprehended that any measure aimed at environmental problems would be possible only with a joint movement. Economic development activities as one of the main reasons behind the environmental damage made it clear that we need to take a number of measures with respect to development. The requirement to further development without damaging the environment has led to the emergence of the concept of “sustainability”.

The concept of sustainability is defined as “the ability to ensure the continuity for an extended period of time without any damage or with minimum damage to the environment” [1]. In this context, this concept which can also be interpreted as the ability of continuity refers to the concepts of development or growth rather than individual use. The emergence of the concept of sustainability owes itself to the raised awareness around the global environmental issues, and the pressure this situation places on the manufacturing and industrial actors. Ecologists believe that environmental protection is more important than any other goal. For economic actors, on the other hand, this demand of environmentalists in a world which competes for economic development translates into giving up fully on development which is accepted as a global policy [2]. This led to a conflict between the interests of economy and ecology. Sustainable development has emerged as a solution for this conflict.

Sustainable development is considered as the development of a country or a region which does not use natural resources at a level and which cannot be replaced in a way that does not harm the nature [3, 4]. The first definition of this concept was suggested in the Brundtland Report in 1987 which goes by “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” [5, 6].

The notion of sustainable development has shaped in long years. The role of the efforts made by UN in the conceptualization of sustainable developments is especially important. In this context, many studies were conducted, reports were developed and conferences were organized [7]. The concept of sustainable development is a dynamic concept which changes with the developments achieved as a result of the efforts made. Summits organized by UN and organizations acting under the UN have played an effective role in the development of the concepts of sustainability and sustainable development in that it brings nations together.

In this study, the steps taken in sustainable development are explored within the context of summits, conferences and sessions organized between 1972 and 2016. The consequences of the decisions and the global sustainability development goals defined in these meetings are discussed for Turkey.

2 Historical and International Development of Sustainable Development

This chapter focuses on international summits which have defined the framework of sustainability and which have played an important role in the emergence and development of the concepts, sustainability and sustainable development, in the recent past and in international platforms.

2.1 1972 UN Conference on the Human Environment (Stockholm)

The awareness raised after the WWII regarding the increased environmental issues, and the threat they pose created the need for a movement against the environmental issues on an international platform. In this context, the first step was taken by the UN, and a

conference was held in June, 1972 with the participation of 113 countries. The purpose of this conference was to develop a shared viewpoint in terms of the protection of human environment and its development, and to define the common principles. As a result of the conference, the “Report of the UN Conference on the Human Environment” which included 26 principles was accepted. This report stated that human beings have the basic right to live in an environment which offers freedom, equality and quality of life and that it has a serious responsibility to provide such an environment and to protect it for the future generations, and it emphasized that racists and discriminating policies must be abandoned. The report drew attention to the need to attend to the environmental issues surfacing in the nature and artificial environment which humans have interaction with, which are emerging in parallel with the increasing world population and which must be considered as a threat to the humanity both in regional and global scale. The world was warned about taking measures in order to decrease the number of environmental issues, having enforced local and global policies in order to leave a better environment for the future generations. Adopting the need to protect any element of the human environment for the next generation, the report also underlined one of the reasons behind the environmental issues as underdevelopment. It was decided that developing countries should receive assistance on international techniques in order for them to protect resources and the environment in their development process [8].

2.2 1976 HABITAT I Conference (Vancouver)

The importance of the human settlements and environment was understood as a result of the 1972 UN Conference on the Human Environment. Held in accordance with the UN recommendation to organize a conference on human settlements, the first UN Conference on Human Settlements, HABITAT I, which was held in Vancouver in 1976 included significant consequences for environment [9]. It is known that the period this conference was held has seen an acceleration in the migration from the suburban areas to urban areas, while still the two third of the world population was living in suburban areas. The rapid urbanization, the preference of people to live in urban areas instead of suburban areas and the understanding that most of the environmental issues are focused on cities show that the scale of environmental issues was not yet to be comprehended fully. In the conference, actors which may facilitate sustainable urbanization and the methods to be followed were discussed, and the important role local governments and local people play in urbanization were emphasized. A UN Center for Human Settlements was established in 1978 [10]. The declaration published at the end of the conference included 19 general principles and a national action plan consisting of 64 articles [11]. HABITAT conferences proved effective in defining goals for sustainable cities and communities.

2.3 1982 UN Conference on Environment Programme (Nairobi)

At the 10th anniversary of the UN Conference of Human Environment held in Stockholm, a UN Environment Programme (UNEP) was established in order to ensure

coordination in actions taken for the solution of environmental issues. As part of this programme, the UN Conference of Environment Program was held in Nairobi in 1982 [12]. The purpose of the programme was to measure the practices applied after the decisions taken in Stockholm, to contribute to the process in line with national policies and demands and the need for intensifying the protection and development efforts in global, regional and local scales. A declaration of 10 articles was published at the end of the conference. UN Conference on Environment Programme stated that the decision taken in the Stockholm Summit were suitable and that they are still relevant, the awareness the conference raised was discussed, it was emphasized that the action plan was partly in place, and new needs emerged in the ten years period were defined. The declaration pointed out to the fact that however the actions which harm the environment are taken under the supervision of governments, international collaboration will be required if the consequences of these actions go over the borders, and the World Commission on Environment and Development was established after the conference. The Conference also played a role in the establishment of the World Charter for Nature in 1982 by the UN.

2.4 1987 Report of the World Commission on Environment and Development: Our Common Future (Brundtland Report)

Organized under the leadership of Gro Harlem Brundtland, former Norwegian President, in 1987, and published by the UN World Commission on Environment and Development, the “Our Future” report is considered the first official document to use the concept of Sustainable Development. Our Future Report defined sustainable development as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The report addresses the environmental issues discussed in the previous declaration and the conferences, and the evolution of these issues. The characteristic of Brundtland Report which differentiates it from other conferences and their results was that it accepts the necessity of economic development and the possibility to serve for this necessity with environmentally-friendly methods [13]. Building on the assumption that economic growth is possible with an environmentally-friendly perspective, the report suggests that developing countries will play an important role in the solution of global environmental problems and prevention of poverty and that it is necessary to initiate a long-term growth age that will facilitate restructuring. Also including information about the demographic structure of the world, Brundtland Report assumes that the world population will be stabilized between 7.7 billion and 14.2 billion, and that the world population will largely be living in urban areas rather than suburban ones [14].

2.5 1992 UN Conference on Environment and Development (UNCED)—Rio Summit (Rio De Janeiro)

In order to be able to overcome the problems in practice which we have faced after the introduction of the concept of sustainable development addressed in Brundtland

Report, UN Conference on Environment and Development—Rio Summit (Earth Summit) was held with the participation of 172 countries under the leadership of the UN. Rio Summit is considered to be an important step in the adoption of a number of principles aimed at the environmentally-friendly government methods used by the nations. Rio Summit differentiates from its predecessors as it addresses environmental issues and development concepts in conjunction. As a result of the Rio Summit, five documents serving as international conventions were created which can be used as a roadmap for issues about environment and development internationally. Among these documents were Rio Declaration on Environment and Development, Agenda 21, Forest Principles, Convention on Biological Diversity, Framework Convention on Climate Change [2].

Agenda 21, the product of the conference which offers an action plan for both environmental and development issues in 4 Chapters and 40 Articles as a methodology plan for sustainable development, is a guiding document about reforms to be done in national policies of countries in terms of trade, environment and economy. It is also known that 1992 Rio Summit and Agenda 21 were important steps in the way to the creation of the goals for 2030. In this context, it can be said that Rio Summit with the purpose of adoption of sustainable development principles in the national policies with respect to environmental sustainability contributed greatly to the specification of sustainable development goals about economy with report and international conventions developed as a result of the summit. As it was the case in 1982 Nairobi Summit, decisions taken in the Stockholm Conference were once again confirmed, and 27 principle decisions were published in the Rio Declaration after the conference. Having discussed sustainable development as a more specific concept, the declaration emphasized the fact that environmental preservation is a part of the development process and that it cannot be addressed separately. In the principles of the declaration, the goals for 2030 were adopted as a principle, and it was underlined that the process must be performed under an international cooperation [15].

2.6 1996 HABITAT II Conference (İstanbul)

HABITAT II Conference was held in the 20th anniversary of the first conference on this subject held in 1976, and aimed at creating sustainable living spaces and finding solutions to accommodation problems. Changing social, economic, politic and environmental conditions of the day required a change in the agenda of the first conference, and a new agenda was proposed in this respect. Decisions made on creating a sustainable global environment and provision of humane accommodation to those who live under substandard conditions while having a clean environment, and the agreed Istanbul Declaration addressed the current and potential consequences of urban population increase. It was noted after the conference that population movements focused on the urban areas in the last two decades, the cities are growing and turning into big hubs in terms of administration, and cities will become important actors economically, socially and administratively in the years to come. Therefore, recommendations such as increasing the authorities of urban administrations, and provision of residence areas and sustainable environment to central governments with the human-centred structuring in

mind were made as an important act for sustainability [16, 17]. The declaration has the quality of a guiding document in order for the nations to find the required funds to actualize their settlement policies.

2.7 1997 Special Session of the UN General Assembly—Rio+5 Earth Summit (New York)

5 years after the Rio Summit held in 1992, Rio +5 Earth Summit was held in order to ensure that sustainable development is not only in the agenda but is in practice [5]. As part of the session, the effectiveness of the decisions made in the Rio Earth Summit was discussed, it was noted that the goaled development was not possible although important steps were taken after Rio Conference, and the importance of taking more substantial steps was emphasized [18]. It was agreed that Agenda 21, defined as the agenda of 21st century, will be adapted to the nations and that each nation will implement its own National Agenda 21 Action Plan. It was a historical moment when the fresh water and energy subjects were adopted as fundamental subjects with regards to clean and renewable energy goals.

2.8 1997 Kyoto Protocol (Kyoto)

The purpose of the Convention on Climate Change and Environment developed in 1992 Rio Earth Summit was to prevent greenhouse gas emissions, and to eliminate or take under control any factors which cause climate change and environmental problems. Decrease of greenhouse gas emissions due to human activities is significant for sustainable development. Held in order to find a solution to this problem, Kyoto Protocol is the only framework aimed at fighting with global warming and climate change. The countries which have signed the protocol are dedicated to reduce their GHG emissions or to increase their rights through carbon trade, if they are not able to reduce their GHG emissions. Nevertheless, any country which has signed the protocol needs to reduce their GHG emissions to the level estimated for 1990. Signed in 1997, the protocol became effective in 2005. The reason behind this delay was the need to reach at a level of 55% of the total GHG emissions in the world with the countries which confirmed the protocol, and that was only possible with the participation of Russian Federation 8 years later. Kyoto Protocol now includes 160 countries and more than 55% of the GHG emissions in the world [19]. With this protocol, industrial nations were forced to reduce their GHG emissions to a level not less than 5% of the level estimated for 1990. Turkey signed the protocol in 2009. Kyoto Protocol can be considered as an important step in prevention of environmental pollution with tax regulations implemented to those countries causing pollution, responsible production and consumption as one of the sustainable development goals and development of green systems, and exploring principles such as climate action.

2.9 2002 UN World Summit on Sustainable Development—Rio+10 Summit (Johannesburg)

Rio+10 Summit was held in order to assess the practices performed between the period following Rio and Rio+5 Summits. The main difference of this summit when compared to Rio and Rio+5 Summits was that it received extensive participation not only from nations but also from farmers, politicians, international organizations, NGOs, etc. as part of one of the most important principles of sustainable development, participation. One of the two documents drafted after Rio+10 Summit was the action plan, and the other was the political manifest which reflects the political will. Consisting of 10 chapters, the action plan brings forth updated goals related to sustainable development. Goals such as energy, health, agriculture, biodiversity and protection of water were presented with the action plan. The fact that nations have showed their dedication to halve the negative conditions related to clean water, hygiene and public health with this action plan was considered a tangible step [20]. When the action plan and declaration were reviewed, it can be said that all the sustainable development goals consisted the agenda of Rio+10 Summit. Among the subjects discussed widely in the political manifest was the importance of international cooperation as it was the case for other declarations published in previous international summits.

2.10 2012 UN Conference on Sustainable Development—Rio+20 Summit (Rio de Janeiro)

Held with the participation of world leaders in 2012, Rio+20 was important as it coincided with the 40th anniversary of 1972 UN Conference on the Human Environment (Stockholm), 20th anniversary of 1992 UN Conference on Environment and Development-Rio Summit (Rio De Janeiro), and 10th anniversary of 2002 UN World Summit on Sustainable Development-Rio+10 Summit (Johannesburg). Described as the 2nd Earth Summit, Rio+20 Summit aimed to assess the developments in the past 20 years, to evaluate the situation and to discuss new decisions. The assessment showed that however the economic development goals were met individually, the global sustainable development goal was not met and that indicators for the performance of the decisions regarding environment which were updated in the summits held since 1992 proved unsuccessful [21]. Rio+20 Summit involved the identification of the global goals and indicators which led to the development of sustainable development goals which were agreed on in the New York Summit held in 2015.

As a result of the Rio+20, a report, “Future We Want”, was published including 283 articles and 53 pages. A very detailed work, the report included principle decisions on sustainable development under relevant categories. Millennium Development Goals decided in the UN meeting held in 2000, and action plans such as Agenda 21 were referred to under the title of Sustainable Development Goals in this report and the importance of defining common goals was emphasized. The period after 2015 was pointed at for common goals and the identification of goals based on taking action was underlined. The need for global, holistic and scientific information regarding sustainable development was also emphasized in Rio+20 Summit [22]. The fact that decisions

taken in the previous summits and the application of principles defined did not meet the expectations and that environmental and economic indicators did not meet the expectations with the exception of regional or local actions contributed to an effort in Rio+20 Summit which offers realistic and reachable goals.

2.11 2015 UN Summit on Sustainable Development (New York): The 2030 Agenda for Sustainable Development

In order to define the universal goals of sustainable development in line with the decisions and goals defined in Rio+20 Summit, a Sustainable Development Summit was held in New York at the level of the Board of UN in 2015. Having gathered in order to create an agenda which was pointed at Rio+20, the nations defined a roadmap to achieve sustainable development fully, and they have adopted common goals in the 2015 UN Summit on Sustainable Development. “Transforming our world: the 2030 Agenda for Sustainable Development”, a new agenda which was accepted by 193 countries, was created and the practices necessary to reach the goals were summarized with the expectation of actualizing 17 main goals and articles defined in order to ensure sustainable development globally by 2030, and efforts made during and before the summit regarding the goals.

2.12 2016 HABITAT III Conference (Kito)

HABITAT Conferences are important steps with regards to building sustainable cities and living spaces as one of the sustainable development goals for gradually growing urban areas. HABITAT III Conference was held in Kito, Ecuador with the participation of nations, governments, NGOs and private sector in order to ensure the cooperation on subjects such as global problems relevant to cities, habitation and sustainable urban development at an international level. The first UN global summit held after the 2030 Agenda for Sustainable Development and Sustainable Development Goals, HABITAT III Conference resulted in the publication of a draft report and Kito Action Plan named “New Urban Agenda”. The estimation that the population of urban areas will be doubled by 2050 was developed with the New Urban Agenda. The Article 9 of the draft report emphasized that the New Urban Agenda will contribute to the 2030 goals, and that sustainable urban development and sustainable development can be achieved with the coordinated and holistic efforts at local, subnational, national, regional and global scales with the participation of the stakeholders of sustainable urban development and sustainable development [23].

3 A Review of UN Sustainable Development Goals at the Scale of Turkey

17 global sustainable development goals were defined and accepted by UN Commission on Sustainable Development to be actualized by 2030 in the 2015 UN Sustainable Development Summit as discussed in Article 3.11. 169 purposes and 230 indicators were defined as part of the goals in question for the scalability of the sustainable development. These indicators may be effective in defining local, national or regional goals as well as facilitating retrospective analyses. In order to review the reflections of sustainable development goals in Turkey, sustainable development indicators published in 2015 by Turkish Statistical Institute (TUIK) were used. The status of sustainable development in Turkey between 2000 and 2014 is discussed.

3.1 No Poverty

The first sustainable development goal of UN aims to end poverty in all its forms everywhere [24]. According to Fig. 1, it is seen that the defined conditions are met as of 2005, GDP per capita has assumed an upward trend and the population under the risk of poverty gradually reduced in years.

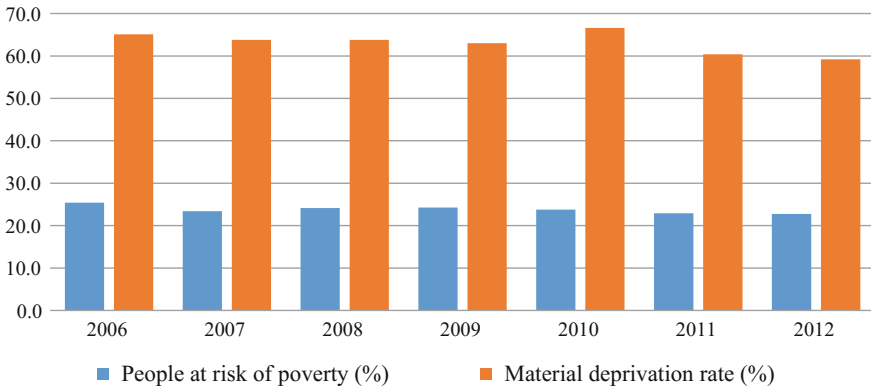


Fig. 1. Risk of poverty and material deprivation rate (%) [25]

3.2 Zero Hunger

Goal 2 intends to end hunger, achieve food security and improved nutrition and promote sustainable agriculture by 2030 [24]. According to Fig. 2, it is seen that cultivated agricultural lands which are under the pressure of urbanization were opened to zoning activities in order to provide easier and increased revenues, thus agricultural land has been gradually reducing every year. Therefore, goals were met for other agricultural activities, however it was not the case for cultivated agricultural lands. This is an element which needs critical importance if it is to achieve sustainability.

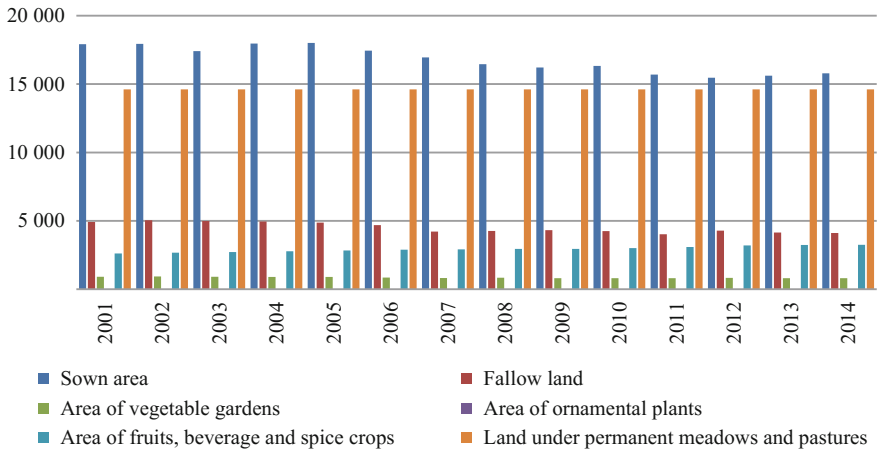


Fig. 2. Total statistical classification of products (1000 ha) [25]

3.3 Good Health and Well-Being

Goal 3 aims at ensuring healthy lives and promote well-being for all at all ages [24]. According to Fig. 3, looking into the age-gender relationship of Turkey’s population, it’s seen that average age has been increasing for both genders, and that average life expectancy is longer in women when compared to men. It is believed that life expectancy is increased depending on the advancements in medicine, increased health investments and improved environmental conditions as it is the case in the world.

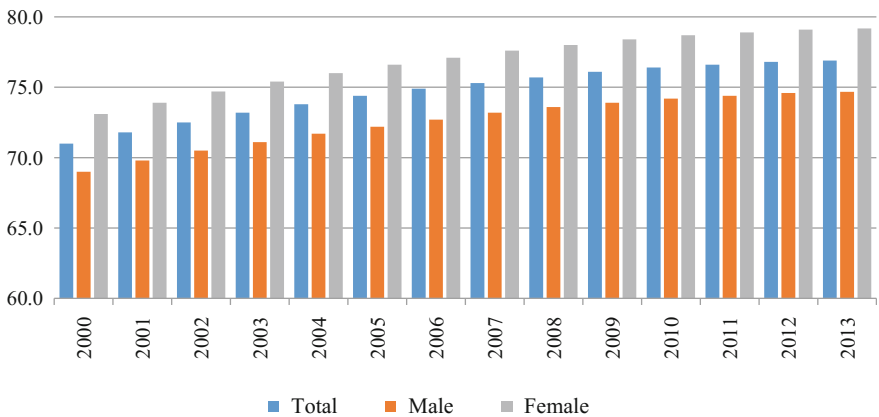


Fig. 3. Life expectancy at birth by sex (years) [25]

3.4 Quality Education

Ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all are aimed in the context of Goal 4 [24]. According to Fig. 4, it is seen that the education level in Turkey is increased in parallel with the increased education period. Increased education period and education level for both genders can be considered as a positive development in terms of the gender equality.

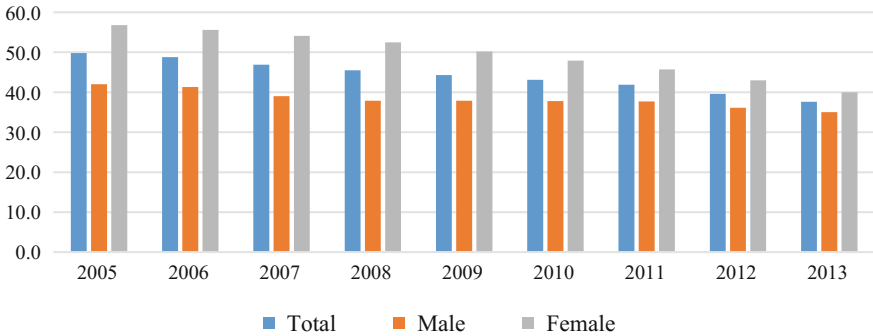


Fig. 4. Early leavers from education and training (%) [25]

3.5 Gender Equality

Goal 5 aims to achieve gender equality and empower all women and girls [24]. According to Fig. 5, it is seen that unemployment rate for women is decreased once was higher comparatively when the long-term unemployment rates are reviewed for gender. However, labour force participation rate of women is found to be lower when compared to that of men's.

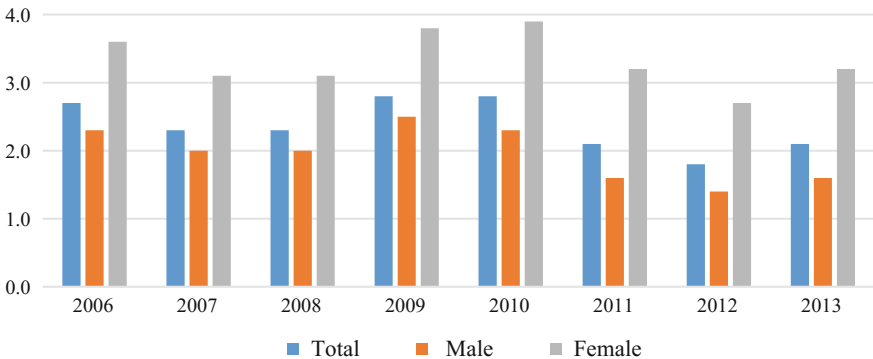


Fig. 5. Long-term unemployment rate by sex (%) [25]

3.6 Clean Water and Sanitation

Goal 6 intends to ensure availability and sustainable management of water and sanitation for all [24]. According to Fig. 6, it is seen that ground water as a fresh water resource available in Turkey is partly reduced, however, waste water and the number of biological water treatment facilities are increased depending on the urbanization. Therefore, it is important for the water preservation and urban health to consider increasing amount of waste water as a threat, to take measures to decrease water use in urban areas, and to ensure widespread use of water treatment technologies.

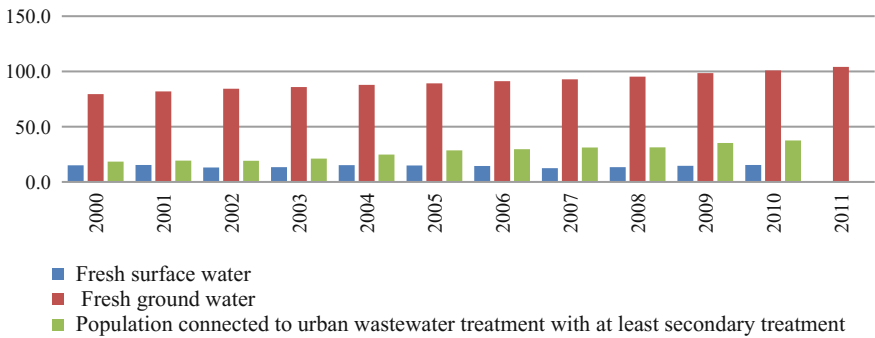


Fig. 6. Fresh water resources (%) [25]

3.7 Affordable and Clean Energy

Ensuring access to affordable, reliable, sustainable and modern energy for all is aimed in the context of Goal 7 [24]. According to Fig. 7, foreign-source dependency in Turkey has increased in years for all of the available energy resources. A slight increase in the renewable energy resources was seen, however, it can be said that the potential is not fully realized. Nevertheless, it was found that R&D activities related to solar and wind energy, i.e. renewable energy resources, were increased and the incentives provided for such projects were also increased.

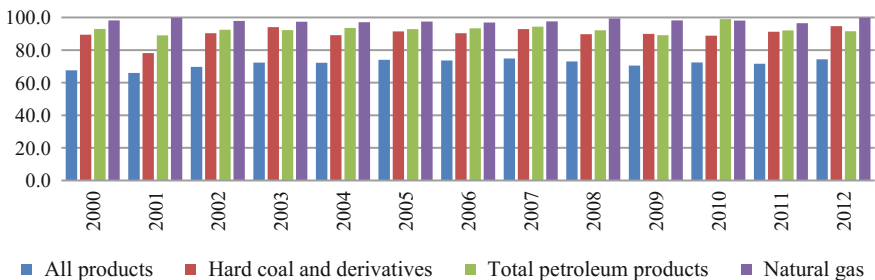


Fig. 7. Energy dependency (%) [25]

3.8 Decent Work and Economic Growth

Goal 8 aims for promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all [24]. According to Fig. 8, it is seen that GDP has not been consistently increasing and negative values are observed in some years, and that sustainability was not achieved fully. It can be said that distribution of GDP shows irregularities due to the impact of regional and national economic crises.

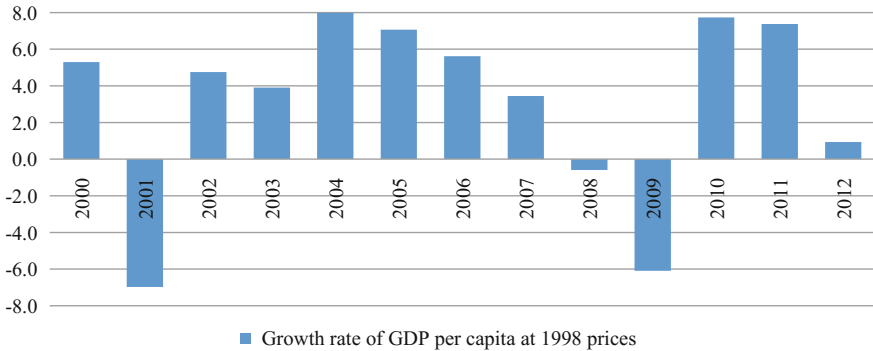


Fig. 8. Dispersion of regional GDP per inhabitant (%) [25]

3.9 Industry, Innovation and Infrastructure

In the context of Goal 9, building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation is intended [24]. According to Fig. 9, it is seen that the share of the industrial innovation and infrastructure budget allocated as part of R&D budget has increased in years.

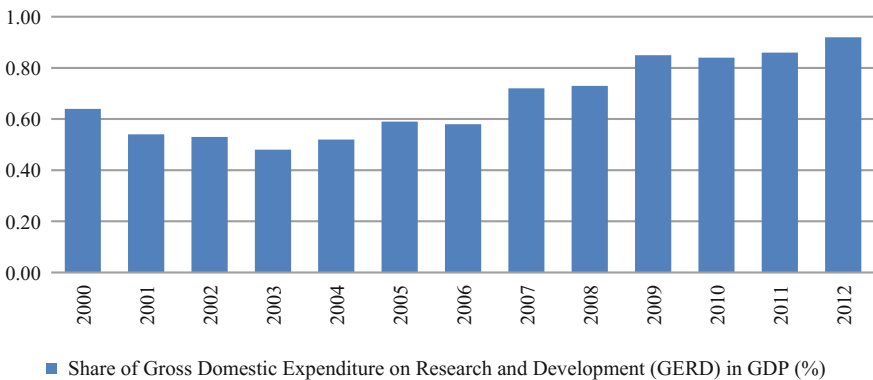


Fig. 9. Innovation, competitiveness and eco-efficiency (%) [25]

3.10 Reduced Inequalities

Goal 10 aims to reduce inequality within and among countries [24]. According to Fig. 10, it is seen that the inequality in income distribution in Turkey has assumed a downward trend in line with the goal. Further reduction of the inequalities in income distribution is important for the sustainable development, first step in the elimination of social inequalities.

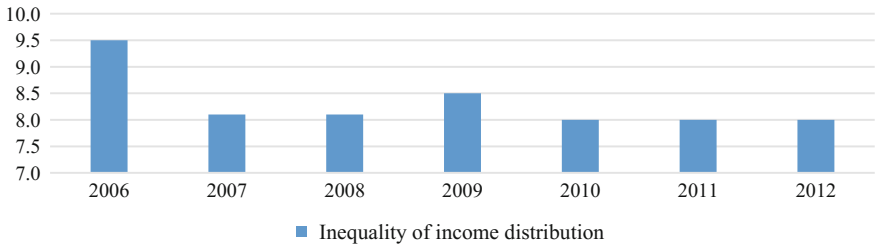


Fig. 10. Inequality of income distribution (%) [25]

3.11 Sustainable Cities and Communities

Goal 11 intends to make cities and human settlements inclusive, safe, resilient and sustainable [24]. According to Fig. 11, it can be seen that official development support and incentives for manufacturing industry have been increased in years. According to the data, it is found that manufacturing industry has been developing consistently, however, the incentives for social infrastructure service investments were increased exponentially.

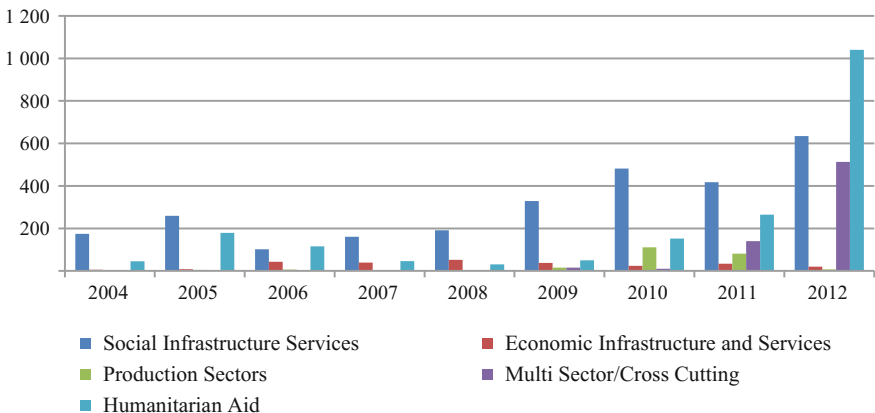


Fig. 11. Bilateral official development assistance by category (million \$) [25]

3.12 Responsible Consumption and Production

Ensuring sustainable consumption and production patterns is aimed in the context of Goal 12 [24]. According to Fig. 12, a review of the resource efficiency and waste management in Turkey shows that the amount of waste has increased in urban areas in years, while the recycling and energy recovery rates are also increased. The fact that waste levels are stabilized in spite of the investments made in years is considered as a positive indicator. However, minimizing the amount of waste which harms the environment is a necessity of a responsible manufacturing and consumption approach.

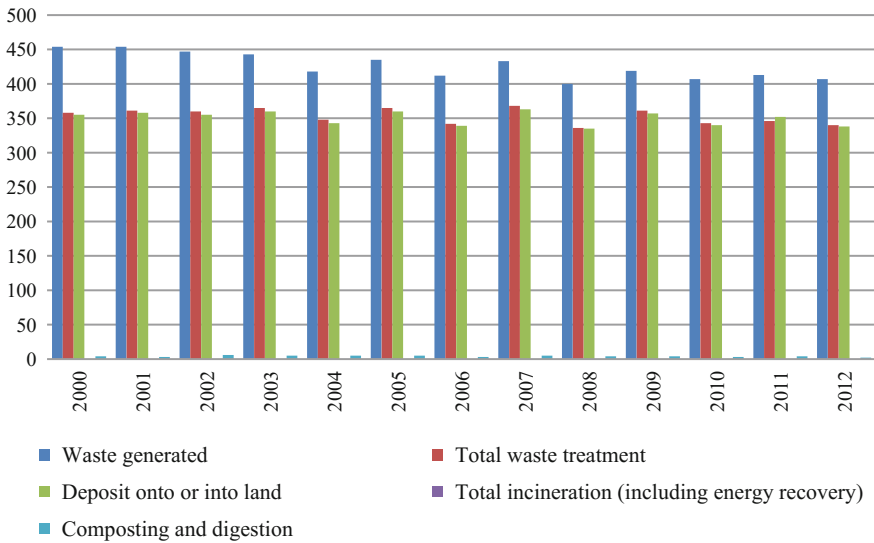


Fig. 12. Municipal waste generation and treatment, by type of treatment method (kg/capita-year) [25]

3.13 Climate Action

Goal 13 aims at taking urgent action to combat climate change and its impacts [24]. According to Fig. 13, a review of the GHG emissions per sector in Turkey shows that emissions are increased in transportation, industrial works and waste, while it was decreased in manufacturing sector. It is critical to reduce GHG emissions in order to prevent global warming and climate change.

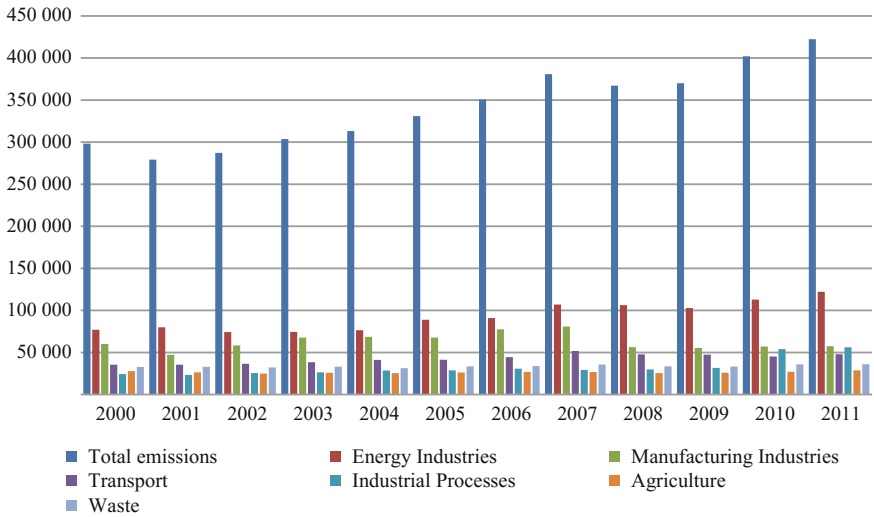


Fig. 13. Greenhouse gases emissions by sectors (Thousand tonnes CO₂ equivalent) [25]

3.14 Life Below Water

Conserving and sustainably using the oceans, seas and marine resources for sustainable development is intended in the context of Goal 14 [24]. According to Fig. 14, a closer look into the surface and ground water levels shows that ground waters were utilized more often in parallel with the fact that surface waters are reduced.

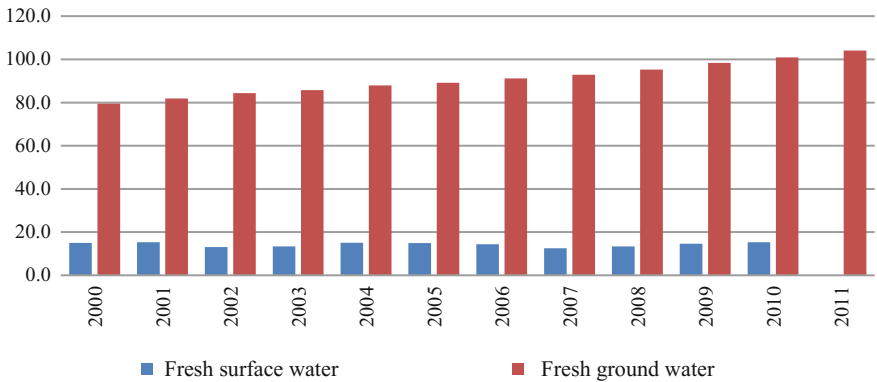


Fig. 14. Fresh water resources (%) [25]

3.15 Life on Land

Goal 15 aims to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land [24].

According to Fig. 15, it can be seen that forest areas are slightly increased in Turkey when the status of forest lands is reviewed. Data from the General Directorate of Forestry also confirms that the forestation activities are increased between 2002 and 2015 when compared to the period between 1946 and 2002.

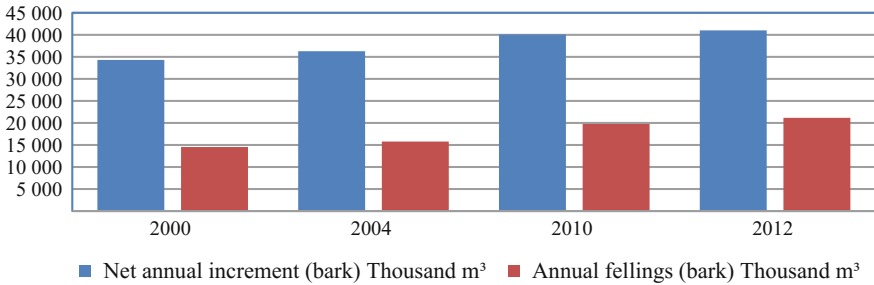


Fig. 15. Land use (1000 m³) [25]

3.16 Peace, Justice and Strong Institutions

Goal 16 aims at promoting peaceful and inclusive societies for sustainable development, providing access to justice for all and build effective, accountable and inclusive institutions [24]. According to Fig. 16, a review of the sustainable development funding data shows that the funding provided to the private sector was decreased, while the total amount of funding was increased. Development subsidies included most commonly humanitarian aids and social infrastructure services.

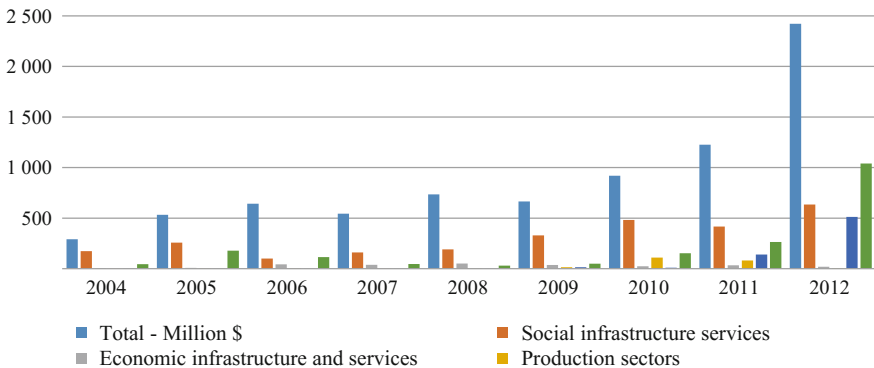


Fig. 16. Development assistance by type (Million \$) [25]

3.17 Partnerships for the Goals

Goal 15 aims to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land [24]. According to Fig. 17, it can be seen that forest areas are slightly increased in Turkey when the status of forest lands is reviewed. Data from the General Directorate of Forestry also confirms that the forestation activities are increased between 2002 and 2015 when compared to the period between 1946 and 2002.

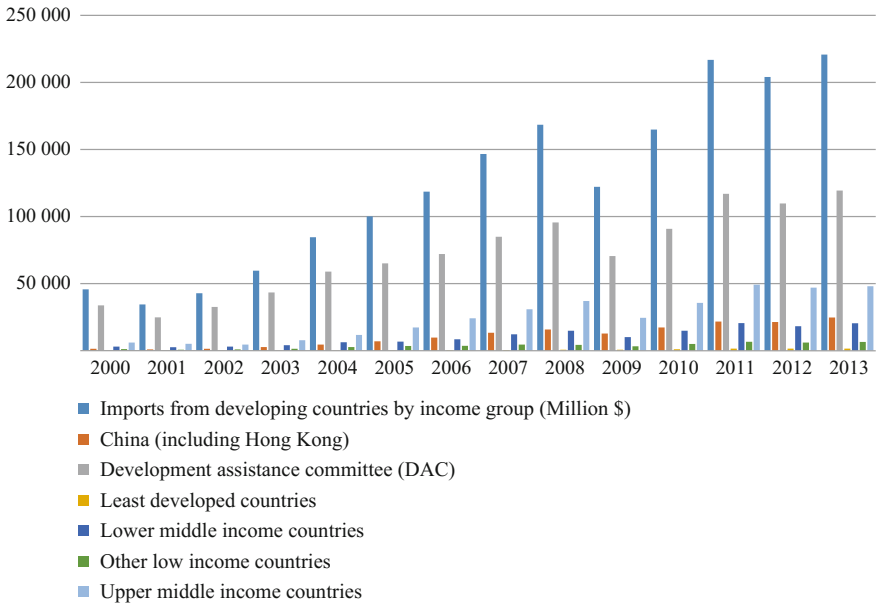


Fig. 17. Globalization of trade [25]

4 Results and Recommendations

Looking into the historical development of the concept of sustainability, it can be seen that awareness around this concept is raised as it is a living, changing and growing concept. Such awareness also led to the necessity of cooperation between past and future generations with a sense of responsibility in addition to individual obligations. First emerged from the possibility of disasters which may arise from environment and environmental issues, this concept has been developed and assumed a character which involves every aspect of life, not only the environment.

One of the most important agenda items of the international process, sustainable development has found itself a place in almost every summit held in the past 50 years. International partnership has been a field which proved challenging with respect to consensus due to social, political, economic and cultural differences. This situation has reinforced the process in which sustainable development was conceptualized and

became a common language. Mentioned for the first time in an international document in 1987, the roadmap for sustainable development was only drafted after 31 years as a result of regular meetings and summits. Existence of local, regional and global differences makes it harder to ensure the scalability of the concept. It is only possible to actualize the global goals set forth by the sustainable development movement with the realization of a globalization which will meet the expectations of every single person living on Earth.

In this study, data on the indicators used for the Turkey review belongs to the years before the goals were set. The subjects prepared in compliance with the Eurostat indicators correspond to those global goals also known as 2030 Agenda. This tells that in fact the goals were set long before the 2015 New York Summit, but it took a while until they were summarized [23]. Data shows that steps are taken in order to achieve sustainable development in Turkey even before the goals were fully defined. It is believed that the year 2030 which is pointed at for sustainable development goals will be a good time to make a sustainability test. In this process, international organizations, governments, local authorities and every individual assume separate and shared responsibilities. It is of utmost importance to create a sense of partnership in order to ensure the sustainability of resources for the next generations along with living in a healthy and suitable environment for human beings.

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