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Brief

COVID-19 & SDGs: Does the current pandemic have an impact on the 17 Sustainable Development Goals? A qualitative analysis

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Executive Summary

FEEM Policy Brief

The following Policy Brief proposes a qualitative analysis on the impact the COVID-19 pandemic and the current Italian crisis could have on the achievement of the 17 Sustainable Development Goals.

The analysis considers all the 169 targets of the 2030 Agenda, in order to study, specifically, which will be the effects of the crisis concerning the three dimensions of sustainable development: economy, society and environment.

The reflection emerging from this document attempts to understand for each Goal and target which could and can be the impacts of the pandemic, of the lockdown and of the overall economic crisis caused by the previous. The results presented in the Brief are based on the evolution of the crisis and on the decree-laws of the Italian government in order to contain it; nevertheless, those outcomes cannot be taken as final, considering the subsisting nature of the crisis, the still outstanding lockdown measures, and the absence of quantitative data related to the post-crisis.

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Introduction

It is clear and it does not surprise the fact that, if so far the 193 Member States who have signed the International Agenda for Sustainable Development back in September 2015 have not been able to reach in an integrated manner all its 17 Sustainable Development Goals by 2030 (not even mentioning those due to 2020), now such an undertaking will be nearly impossible.

It is common to think that the health emergency caused by the Coronavirus and the socio-economic crisis associated with it, which for the last month has turned the life of whole nations upside down – Italy on the top of the list – and which, presumably, will continue to do so until date to be defined, are having and will have strong impacts on the achievement of a full sustainability as intended by the United Nations and its Member States. Just think of economy, poverty, inequalities: the path towards a sustainable development is all to be redesigned and, partly, to be retraced.

It is hard to define precisely – considering the fact that nobody could be said to be out of the emergency – which will be the impacts of the pandemic on those countries having faced it: the quantitative data are not yet enough and any accurate analysis based on them is thus premature. Nevertheless, it is possible to assume, beforehand and at times in progress, a map of the SDGs, or, if one prefers, the macro

sectors to which they belong to, that most severely will suffer the consequences of the epidemic; on the contrary, it is also possible to save, among the many targets included in the Agenda, the few that, instead, in a way or another, will not be as negatively impacted from the crisis, but that will be in a sense enhanced and favored by it.

The following analysis, that for consistency is going to be called “qualitative assessment”, focuses on the effects the crisis could have on the achievement of the Goals by 2030. Specifically, the analysis tries to understand whether, and how much, Italy will move away from the achievement of the 17 Sustainable Development Goals. The evaluation has been developed partially by analyzing the existing data and partially trying to foresee those being the effects of the pandemic on Italy’s economy and society, as well as the attention the country will devote from here on out to the challenges faced by the 2030 Agenda – first of all concerning the ecosystem and climate change, but also the fight against poverty and inequalities, the full occupation and economic growth and, of course, the essential sectors such as health and education.

Considering the integrated and interconnected nature of the 17 Goals included in the 2030 Agenda, it is out of doubt that the pandemic will have a more or less pronounced impact on all

of them. However, emphasis must be placed on the fact that the 169 targets or sub goals, on which this analysis is focused, are not always appropriate or sufficient to capture all the criticalities raised by the COVID-19 emergency. As the reader will see in the results section and in the Box “The limits of the 2030 Agenda targets in the complexity of the COVID-19 crisis”, the 2030 Agenda is not always able to provide an encompassing and systemic comprehension of the shock generated by the pandemic, and it is therefore necessary to develop a critical reflection covering its revision and redefinition. On the other hand there is no doubt that the 2030 Agenda represents a framework dotted with different actors, sectors and responsibilities: for this reason, in the guise of tool available for communities and institutions, the quality of its outcomes depends, other than on its contents, also on the use that is made of it.

Methodology:

The used methodology, resuming the one already designed by the Region of Sardinia in the context of the Strategic Environmental Assessment for the evaluation of the environmental sustainability of its programs (ERDF ROP and RDP) for the timeline 2014-2020 (Moro *et al.*, 2014) and later applied in the course of 2018 as a support for the reprogramming and monitoring of the ERDF ROP of the Region (Sanna *et al.*, 2018) is born out of the attempt to evaluate the impact of the current COVID-19 emergency on the 17 Sustainable Development Goals and their 169 targets in Italy.

The impact evaluation was conducted looking

at the interconnections between COVID-19 and the 169 targets of the 2030 Agenda, giving birth to a weight-populated matrix risen from qualitative assessment on the single voice's relevance.

First of all, a weight has been assigned, with it being null/indirect/direct, respectively equal to 0, 0,5, and 1 for each combination of target/ COVID-19. For each square detected by the precedent matrix with a non-null weight, a second series of weights has been applied in order to define the orientation, negative or positive, equal to -1 and +1. At the end, in order to take account of the magnitude of the different voices, a third series of weights has been assigned, respectively 0,33 (low), 0,66 (medium) and 0,99 (high). Lastly, the final count has been the result of the multiplication of the above-mentioned weights, target by target (Figure 1).

For instance, for the target 1.1, “By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day” the analysis has proceeded as follows:

- An indirect impact of COVID-19 has been assigned to the target (equal to 0,5);
- Being the weight different from zero, an orientation has been assigned, in this case negative (equal to -1), due to the economic difficulties of the population compounded by the pandemic;
- A magnitude has been assigned (equal to 0,66), since the above-mentioned difficulties to date represent one of the biggest issues our country is supposed to deal with;
- Multiplying the three assigned weights

($0,5*(-1)*0,66$) the final weight has resulted (-0,33).

At the end of this punctual process, for each Goal the average of its targets' final weights

has been calculated, thus generating a result able to track the impact the epidemic is having, in the present and with future repercussions, in our nation.

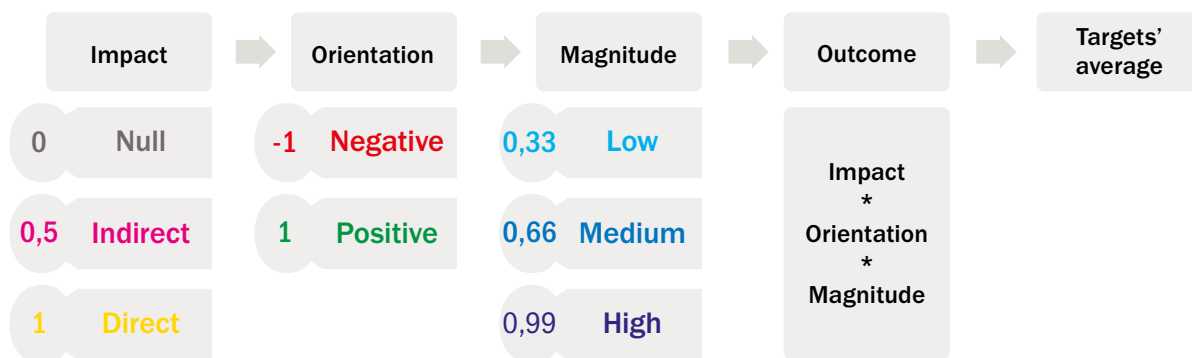


Figure 1 The methodology

Results:

Figure 2 summarizes the results that have been obtained by applying the described methodology. In particular, each arrow represents the average of the final weights that have been assigned to each of the targets of every Goal. An arrow that is oriented towards the outside and colored in red reflects a negative impact; vice versa, an arrow oriented towards the inside and colored in green represents a positive impact. Let us consider,

for instance, Goal 1 and its arrow: this indicates that the impact of COVID-19 on the targets of Goal 1 is on average negative and it is lower than that attributed to Goal 8, and higher than that of Goal 4.

The remaining part of this section presents the main results for each single Goal, in order to provide a specific and detailed picture of what has emerged during the analysis.



Figure 2 *The impact of COVID-19 on the 17 SDGs*

1. No Poverty

Goal 1 is one of the most negatively impacted SDGs by the current pandemic COVID-19. Despite the attempts of the Italian government, although limited if compared to the seriousness of the economic repercussions of the virus on the population, most of the targets of this Goal (4 out of 7) will suffer an indirect, negative impact, of medium magnitude, due to the epidemic. The only exception could actually be Goal 1.3, “Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable”, whose achievement could eventually be implemented and catalyzed not only during the course of the crisis, but also after its overcoming, thanks to social and economic protection measures applied at institutional level in order to face the difficulties

experienced by the most vulnerable. In general, the incomes of the population are and will continue to be negatively influenced by the economic losses of companies and productive activities – a situation which will increment poverty as a whole. In this regard, according to a study recently published by Oxfam entitled “Dignity, not destitution”, the global socio-economic impact of the pandemic will be devastating both for developed and developing countries. This situation, which will also interest Italy, will be primarily caused by an overall reduction of the earnings, but also by the absence of protections and perspectives for the unemployed and informal workers.

2. Zero Hunger

Goal 2 will not present the same criticalities of Goal 1 since the trends of the agricultural sector, considered as essential during the

crisis, should remain unchanged despite the hand of exports and the closure of bars, restaurants and canteens, which concern and disadvantage the sector. Specifically, 6 out of 8 targets seem not to react to the emergency of COVID-19, whose impact would therefore be null. Among others, Goal 2.3 could be an exception, “By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment”, considered an aspiration barely implausible in front of the pandemic (the impact on this target is esteemed to be indirect, negative and low). On the contrary, the most sensitive target would be Goal 2.1, “By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round”, tightly linked to the Goal on poverty. In this regard, according to a Coldiretti elaboration of some data contained in the annual report of the Fund for European Aid to the most Deprived (FEAD) of June 2019, the alimentary difficulties of our country, very exacerbated by the outbreak of the epidemic, are concentrated in the regions of southern Italy such as Campania, Calabria and Sicily, but also in Lazio and in Lombardy, now exhausted by the health emergency. Throughout the peninsula, many are the people at risk of hunger, most of all the homelesses, the elderly above 65 and the children under 15.

3. Good Health and Well-being

Goal 3 seems like being impacted in a really negative way by COVID-19. Despite the general result given by the average of its targets' values is not the most negative one by far – fact that could surprise, considering the health emergency Italy is facing in these weeks – Goal 3 is the only one presenting some direct impacts on its targets (3 out of 13). Specifically, the most involved one is the 3.3 on epidemics and communicable diseases, impacted in a direct, negative way by the crisis, and with high magnitude. Opposite way for Goal 3.d, “Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks”, which is impacted by the crisis in a direct but instead positive way, due to a higher attention given by nations towards the prevention and reduction of the risks connected to the health of the people. It must be highlighted how, despite some direct correlations between the health emergency caused by COVID-19 and Goal 3 of the 2030 Agenda do actually exist, the targets of this Goal show evident limits when talking about grasping the scope and the consequences of a pandemic like the present. Specifically, although some elementary indicators (but still not the targets) could partially help filling this gap, it is still impossible to extract specific references from the international available tools, which concern the health structure management in case of emergency, the risks of national systems, or the more general investments in public health (for a deepening, please refer to the Box “The limits of the 2030 Agenda targets in the complexity of the COVID-19 crisis”).

4. Quality Education

Goal 4 may suffer worse consequences of the epidemic than Goal 3. The closure of schools and the replacement of traditional teaching with the new e-learning modalities, relying on the availability and knowledge of electronic devices, may have negative repercussions on the teaching methods of professors and hence on the learning of students (Goal 4.1, “By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.”). Moreover, the access to quality early childhood development and pre-primary education (Goal 4.2) and the equal access to all levels of education and vocational training for the vulnerable (4.5) are likely to be particularly hit. The latter target, since linked with the most vulnerable population groups, would be impacted by the crisis in a negative and high manner, unlike the other targets whose magnitude of the COVID-19 effect is medium. In general and as can be deduced from a note by the European Trade Union Committee for Education (ETUCE), in the analysis of the impact of the pandemic on education we should take into account those potentially most critical situations – migrant teachers, those working in rural areas or in general those who have not been supported to develop a high level of ICT proficiency, along with distance learning for students with special needs or from special households. Again, the most worrying aspect about this Goal would be the “quality” of education, not to be confined to the mere methodology, but rather connected with the “social” role of the educational systems, whose absence should be added to the inadequate and unequal access to the

support, as well as the stress of the isolation and the disease.

5. Gender Equality

When it comes to Goal 5, we expect that the negative impact, though present, will not be extremely marked regarding female presence in institutions and their role in the labor market. By contrast, the health emergency could influence in a negative way the discrimination against women and girls (Goal 5.1) and especially the violence against them in the public and private spheres, including human trafficking and sexual and other types of exploitation (Goal 5.2) – situation arguably made more frequent by the lockdown measures which impose forced cohabitation in already problematic familiar situations. On the other hand, the target 5.b, “Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women” could be strengthened, and its achievement in 2030 consequently accelerated.

6. Clean Water and Sanitation

The COVID-19 emergency does not have remarkable impacts, neither positive nor negative, on Goal 6 at hand. It is indeed thought that the pandemic and the crisis generated by it do not have significant effects on the access to drinking water and to sanitation and hygiene, on the families’ behavior concerning water resource and in general on the efficiency of water supply. Nevertheless, there is an important correlation between Goal 6 and COVID-19 transmission: the latter, in fact, is reportedly slowed down through rules of personal hygiene such as

handwashing, disinfection of surfaces, use of masks and gloves in household chores and not. However, we should not underestimate the large shortcomings of Italy in terms of water supply efficiency as well as local situations where the available water, and hence its offer, is not sufficient to cover the demand (ISTAT, 2019).

7. Affordable and Clean Energy

Also as regards this Goal, we do not expect effects caused by COVID-19 emergency, neither direct nor indirect, neither positive nor negative. The energy sector, in fact, would not be impacted and all the effects of the emergency on this Goal would be non-existent. Indeed, in accordance with the 5 targets of Goal 7, in line with the methodology applied in the analysis, not a single one would have an actual correlation with the pandemic. Despite the two targets referring to international cooperation and energy services for developing countries (Goal 7.a and 7.b), to whom we have given a secondary priority because of foreign policy issues and subsequent economic choices, COVID-19 emergency would not seem to have repercussions even on universal access to energy services (Goal 7.1), on the share of renewable energy (Goal 7.2), or on the global rate of improvement in energy efficiency (Goal 7.3).

8. Decent Work and Economic Growth

Goal 8 on decent work and economic growth turns out being particularly badly hit by the current emergency. Half of its targets (6 out of 12), indeed, is believed to be suffering from the pandemic an indirect negative impact of

medium-high magnitude; moreover, 2 other targets are undergoing a low-magnitude effect, negative again. In fact, the lockdown in progress has caused and is still going to cause important economic losses for businesses and productive activities, and so income drops for workers and circumstances of increasing economic difficulties for them. In addition to further losses in a future of (slow) recovery, unemployment and especially the number of NEET will presumably grow in an evident way. In this respect, the targets of Goal 8 most affecting the final outcome, hence with a negative and high-magnitude impact, would be Goal 8.5 on full employment and decent work with equal pay, and Goal 8.6 on youth employment, education and training. Medium magnitude, as mentioned above, for the targets concerning the achievement of higher levels of economic productivity through diversification, technological upgrading and innovation (8.2) and the promotion of policies to support job creation and growing enterprises (8.3), with a focus on tourism creating jobs and promoting local culture and products (8.9). Lastly, Goal 8.8 would be affected as well: “Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment”, given the delicate situation of those groups to which it refers.

9. Industry, Innovation and Infrastructure

As regards Goal 9, the importance of sectors such as innovation and infrastructure, despite the latter depends almost exclusively on the fiscal policy adopted, makes the Goal the only

one which could hopefully improve in this period of crisis, and hence the only one (slightly) impacted in a positive way by the pandemic. Indeed, despite the closure of businesses and the lockdown of productive activities (the main cause of the negative results for Goal 8), it is expected that innovation and new technologies will become cornerstones of a new paradigm and system of our economy and society. In fact, it is thought that the field of scientific research may be the most privileged by the emergency, with an indirect, positive and medium-magnitude impact. Particularly speaking of Goal 9.5 on research and development, which shall be deemed to be about the medical-sanitary field. The trend is different for Goal 9.2, “Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry’s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries”, more connected to Goal 8 on economic growth and decent work, which instead is assumed to worsen significantly.

10. Reduced Inequalities

Very connected to Goals 1 and 8, Goal 10 as well, regarding the reduction of inequalities, is likely to get worse. The deterioration is going to be especially about the most vulnerable segments of the population. The measures recently adopted by the Italian government are not actually going to eliminate the problem of inequalities between now and 2030; on the contrary, we expect to see a negative impact on Goal 10.1, “By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average”. A worsening is

evaluated also in terms of social inclusion (Goal 10.2), of safeguarding of equal opportunities (Goal 10.3), and mostly of managing the migration and mobility of people (Goal 10.7): the limitation of mobility of people may in fact further slowdown the implementation of immigration and integration policies. If these comments were about inequalities within the country, a different reflection should be made about inequality among countries. In this respect, we can see Goal 10.5, “Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations”, being negatively impacted by the pandemic. COVID-19 has indeed jeopardized, and is still jeopardizing, an already-fragile system such as the one of global financial institutions, with an ever-increasing pressure on them. With respect to this Goal, it is important to highlight how COVID-19 gets transmitted without distinction nor discrimination, hence becoming a sort of social leveler; however, we must not neglect how the response to the disease, and so its prevention, can vary according to some discriminating factors connected to lifestyles – just think of online shopping, smart working, physical and geographical possibility of auto isolation, or how the occupation may be more or less exposed to the chance of contracting the disease. In this regard, although some public measures can make the difference for those specific segments of population which are being targeted, any measure could not still be able to compensate for the economic and social impacts of the pandemic.

11. Sustainable Cities and Communities

On the one hand, the limitation of mobility and hence of the vehicle traffic, as well as the closure of businesses, lead to a benefic effect on the urban environment, which is seen in a positive impact by the pandemic on Goal 11.6, “By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management” (for more details see the Box “The limits of the 2030 Agenda targets in the complexity of the COVID-19 crisis”). On the other hand, it is not expected that the other targets of the Goal will respond in an equal way to the crisis. Furthermore, there are no other substantial impacts expected on transport, urban settlement management and planning, access to public green areas or the preservation of cultural and natural heritage. A greater impact would be on Goal 11.1, “By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums” and even greater on Goal 11.5, “By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations”, both Goals being related to the management of poor neighborhoods and to the protection of this section of population from an economic and social point of view.

12. Responsible Consumption and Production

It is expected that Goal 12 will be impacted in a similar way to Goal 11, always negatively but in a less pronounced manner compared to what happens for the other Goals (for more details see the Box “The limits of the 2030 Agenda targets in the complexity of the COVID-19 crisis”). Regarding Goal 12, it is thought that most of the impacts can’t yet be defined with confidence, which is why, to date, the effects of the pandemic turn out to be zero, mostly as concerns the behaviors about recycle and landfill waste. A different line of view concerns Goal 12.3, “By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses”. Here it is evident that lost harvests due to shortage or decrease of labor would affect the food sector starting from the supply chain, rather than the activities of bars and restaurants forced to close influencing the waste related to final consumption of food. Moreover, due to the vulnerability of the tourism sector, very delicate is also Goal 12.b “Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products”: it would be very ambitious, in times like these, to talk about sustainability in the tourism sector, which would be also able to create new jobs.

13. Climate Action

The impacts the pandemic will have on Goal 13 targets seem to be null or indirect, negative and with low magnitude. The fundamental idea is that climate change, as well as the resilience

related to natural disasters or the cooperation to implement directives or conventions on climate change, will become secondary issues in the short-medium run, considering the socio-economic crisis that our country, as many others, will go through. It is still to be ascertained whether – topic still not made explicit in none of the targets of Goal 13 – the arrival of the disease, the industrial paralysis and the limitation of movement of people will lead to a lasting reduction, therefore able to influence the global behavior from now until 2030, of carbon dioxide released in the air.

14. Life below Water

It is expected that the pandemic and the subsequent crisis will not have a significant impact on this topic, mainly for what concerns the changes in the fisheries sector or the protection of coastal and marine zones. The only target that could be slightly responsive to the emergency would be Goal 14.1, “By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution”, also considering the recent medical waste released in coastal areas – a damage partially balanced by the positive impact that the block of freight and passengers maritime transport could have on the pollution of the seas and the oceans.

15. Life on Land

No impacts are expected on Goal 15 since, strictly according to its 12 targets, in line with the methodology used during the analysis, none of the targets would have a real correlation with the pandemic. Therefore, the specificity of this Goal’s theme, which includes the fight

against deforestation, land degradation and loss of biological diversity, would indeed have neither direct nor indirect links with the current health emergency. Considering that the virus in question apparently derives from an interaction between the human being and animals, it would be instead interesting to study, through new and further analyses, how the development of pandemics such as COVID-19, and therefore their birth more than their consequences, are actually connected with the environment that surrounds us, and more precisely with its exploitation and that of the animals that inhabit it. In this regard, as WWF argues in its report “Pandemics, the boomerang effect of the destruction of ecosystems”, “while the destruction of habitats and biodiversity creates favorable conditions for the spread of emerging zoonotic diseases, the creation of artificial habitats or, more simply, environments poor in nature and with a high human density can further facilitate it”. However, this remark is not implicated in Goal 15 targets previously taken into consideration.

16. Peace, Justice and Strong Institutions

Goal 16 is going to be evidently slowed down due to the pandemic. Although it is believed that crimes may decrease due to the lockdown, forms of violence could increase (see Goal 5, and the related Goals 16.1 and 16.2) as well as the use of illicit arms and organized crime (Goal 16.4, “By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime”) and corruption (Goal 16.5, “Substantially reduce corruption and bribery in all their forms”). Even

if the development of effective, accountable and transparent institutions could experience an improvement (Goal 16.6), Goal 16.7 might be going in the opposite direction, “Ensure responsive, inclusive, participatory and representative decision-making at all levels”, as well as Goal 16.10 “Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements”.

17. Partnership for The Goals

No factor of the crisis is predicted to have a major impact on international cooperation and development aid. The acceleration that Goal 17.6 could undergo, especially regarding “access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism”, would nonetheless be balanced by the negative impacts on Goals 17.11 concerning the increase in the exports of developing countries, and 17.13 regarding the enhancement of global macroeconomic stability.

Box “The limits of the 2030 Agenda targets in the complexity of the COVID-19 crisis

This section reports some of the issues – chosen among many purely by way of example – that demonstrate the limits of the targets analysed, thus underlining how the 2030 Agenda does not always manage to provide an all-inclusive and systemic understanding of the shock that the pandemic is generating.

Goal 3 itself, considered to be the only one directly and negatively impacted by COVID-19 in 3 of its 13 targets, does not allow to fully grasp the impact of the ongoing pandemic on Good Health and Well-being, thus neglecting some aspects related to it. Indeed, only 3.3 and 3.d refer respectively to epidemics and to the risk prevention for national and global health, while there are no exclusive mentions regarding the prevention and fight against epidemics.

Similarly, Goal 11 targets provide a partial view of the COVID-19 problem. In this case an area of it would even show improvements thanks to the pandemic – see Goal 11.6 linked to the drop in CO2 emissions. Clearly, this result must not be interpreted in an exclusively positive way, since it is neither a structural decline nor a permanent one. In fact, it is highly probable that in the medium/long-term there will be a return to emissions growth, in any form and without any cost, in line with what happened after the financial crisis of 2008-2009 (Peters *et al.*, 2012). A further evidence that supports this anticipation is the recent statement by the Environmental Protection Agency, which cited the pandemic as a justification for suspending many of the current pollution regulations in the United States (The New York Times, 2020).

The connection with Goals 13, “Climate action”, and 15, “Life on land”, thus becomes immediate. As a matter of fact, both of them would be clearly damaged by the potential emissions increase and the post-crisis abandonment of sustainability criteria. In the United Nations Economic Commission for Europe (UNECE) convention on air pollution, all the dangers that air pollution generates for ecosystems and biodiversity are outlined in detail. However, none of the targets of the aforementioned Goals allows to appreciate this deleterious dynamic.

Finally, Goal 12 targets, which are focused on responsible consumption and production and on circular economy, fail to fully grasp the impact that the pandemic is already having on the demand and supply dynamics. Considering the imposed lockdown measures and the huge number of workers on stand-by, it is highly likely that consumption will drop, production will consequently reduce the supply, labour will further decrease and so will its market. Not surprisingly, the International Monetary Fund has predicted a global recession with a serious rise in unemployment, a high volatility in the financial markets and huge disruptions in the transport, hotel, entertainment and retail sectors (IMF, 2020).

These examples underline how the SDGs must be seen in a systemic and not isolated way, to avoid depicting a partial and incomplete picture of the implications of the current situation. Furthermore, it has emerged that there is a need to read the Agenda critically, in order to make it be able to fully seize the systematic and all-inclusive shock that COVID-19 is imposing on our society.

Conclusions and reflections:

Given the current pandemic and the economic and social crisis it has generated, it seems fundamental, even if at times premature, to propose a reflection on the effects that this ongoing situation will or may have on the achievement of the Sustainable Development Goals (SDGs).

Italy has adopted restrictive measures for economic activities and limitations to the mobility of people starting from February 23rd, 2020; these measures are still in place and it is difficult to say with certainty when they will actually end. Considering what happened during these months, thus including on the one hand the economic loss, and on the other hand government's decrees containing economic and social shock absorbers firstly for companies and employees and secondly for families and self-employed workers and others, the effects of COVID-19 have been analysed on the basis of the 17 Sustainable Development Goals (SDGs) and their 169 targets, as defined by the 2030 Agenda for Sustainable Development.

Therefore, by assessing the impact (zero, indirect, direct) of the pandemic on each target, its orientation (negative or positive) and its magnitude (low, medium, high), a qualitative analysis has been carried out concerning which of the Goals will be the most impacted by the crisis, and how these effects will be reflected on the economic and social life of our country.

From a point of view purely based on the 2030 Agenda, with its Goals and targets, it emerged that Goal 1, "No poverty", Goal 4, "Quality education", and Goal 8, "Decent work and economic growth", are the most impacted Goals. Although it may seem surprising, since it is first and foremost a health emergency, that Goal 3 "Good health and well-being" is not included in this list, it is nonetheless the only Goal that the pandemic seems to impact directly. The Goals spared by the pandemic are Goal 6, "Clean water and sanitation", Goal 7, "Affordable and clean energy" and Goal 15, "Life on land", for which Italy's behavior does not appear to have varied after the explosion of the emergency. Goal 9, "Industry, innovation and infrastructure", seems to be the only Goal getting closer to its achievement by 2030: the introduction of new technologies especially on a professional level (smart working) and on an educational one (e-learning) could represent a positive turning point in the achievement of this Goal.

Anyhow, further and careful reflection is needed on some results. Although from the analysis it has clearly emerged that, looking at the respective targets, the energy sector is negligibly affected, with even zero impacts on Goal 7, we cannot avoid detecting how intense and central the debate on fossil fuels and energy transition appears nowadays. Let us consider, for example, the relation between COVID-19, the overall drop in energy demand, the collapse of the price of oil (which finances renewable energies) and the hypothesis of the consequent standstill of investments in

renewables. Moreover, although the analysis indicates that only 2 out of 8 targets of Goal 2 seem to react to the COVID-19 emergency, the effects of the pandemic on food, hunger, food security and labor in the food supply chain cannot be ignored.

It is important to emphasize how, due to the detailed analysis of the targets of the 2030 Agenda proposed here, some crucial issues have emerged and have led to a clear conclusion: the targets must be carefully reread, adapted and expanded in a more extensive way in order to grasp all the aspects of sustainable development in its economic, social and environmental meaning (see the Box “The limits of the 2030 Agenda targets in the complexity of the COVID-19 crisis”).

The 2030 Agenda represents the only valid and complete reference framework for sustainable development, dotted with different actors, sectors, responsibilities: therefore, as a tool in the service of communities and institutions, the quality of its results depends not only on its contents, but also on the use that is made of it. Therefore, it is necessary to raise awareness and construct a new contextualization of the issue, which would allow the necessary elasticity to grasp and provide a systemic understanding of the shocks that the pandemic and other phenomena – in the future – will generate.

References:

Alleanza Italiana per lo Sviluppo Sostenibile, *Effetto della crisi Covid-19 sull'andamento degli indicatori nel 2020, nell'ipotesi che a giugno termini l'emergenza sanitaria*, March 2020.
[Available at: https://asvis.it/public/asvis2/files/ValutazioneIndicatori_2030_finale_def.pdf]

Coldiretti, *Coronavirus, la mappa della fame per regione*, March 29th, 2020.
[Available at: <https://www.coldiretti.it/economia/coronavirus-la-mappa-della-fame-per-regione>]

Friedman, L. E.P.A., *Citing Coronavirus, Drastically Relaxes Rules for Polluters*. The New York Times, March 26th, 2020.
[Available at: <https://www.nytimes.com/2020/03/26/climate/epa-coronavirus-pollution-rules.html>]

International Monetary Fund, *G-20 Surveillance Note COVID-19 - Impact and Policy Considerations, G-20 Finance Ministers and Central Bank Governors' Meetings*, April 15th, 2020.
[Available at: <https://www.imf.org/external/np/g20/pdf/2020/041520.pdf>]

Istituto Nazionale di Statistica, *Utilizzo e qualità della risorsa idrica in Italia*, 2019.
[Available at: <https://www.istat.it/it/files//2019/10/Utilizzo-e-qualit%C3%A0-della-risorsa-idrica-in-Italia.pdf>]

Moro L., Pira C., Sanna S., Schirru F., *La VAS nell'ambito della programmazione dei fondi strutturali per il periodo 2014-2020: un approccio metodologico*. Paper presented at XXXV Conferenza Italiana di Scienze Regionali AISRe, Padova, 2014.

Oxfam, *Dignity not destitution: An 'Economic Rescue Plan For All' to tackle the Coronavirus crisis and rebuild a more equal world*, April 2020.

[Available at: <https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620976/mb-dignity%20not%20destitution-an-economic-rescue-plan-for-all-090420-en.pdf>]

Peters, G., Marland, G., Le Quééré, C. et al. *Rapid growth in CO₂ emissions after the 2008–2009 global financial crisis*. Nature Clim Change 2, 2–4 (2012).
[Available at: <https://doi.org/10.1038/nclimate1332>]

Sanna S., Dessy A., Cocco G., *Verso la programmazione post 2020. il contributo del POR Sardegna FESR 2014-2020 agli obiettivi di sviluppo sostenibile dell'agenda 2030 e della strategia nazionale per lo sviluppo sostenibile*. Paper presented at XXXIX Conferenza Italiana di Scienze Regionali AISRe, Bolzano, September 17-19th, 2018.

United Nations, *Shared Responsibility, Global Solidarity: Responding to the socio-economic impacts of COVID-19*, March 2020.
[Available at: https://www.un.org/sites/un2.un.org/files/sg_report_socio-economic_impact_of_covid19.pdf]

WWF Italia Onlus, *Pandemie, l'effetto boomerang della distruzione degli ecosistemi. Tutelare la salute umana conservando la biodiversità*, March 2020.
[Available at: https://d24qi7hsckwe9l.cloudfront.net/downloads/pandemie_e_distruzione_degli_ecosistemi.pdf]

<http://www.governo.it/it/coronavirus-misure-del-governo>

<http://www.salute.gov.it/portale/nuovocoronavirus/dettaglioFaqNuovoCoronavirus.jsp?lingua=italiano&id=228#1>

<https://www.csee-etuice.org/en/policy-issues/covid-19/3745-covid-19-and-distance-teaching-must-not-widen-inequalities-in-education>

<http://www.unece.org/environmental-policy/conventions/envlrapwelcome/cross-sectoral-linkages/air-pollution-ecosystems-and-biodiversity.html>



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