

THE JOB QUALITY IN THE 21st CENTURY: A ROAD MAP TO A NEW DEVELOPMENT MODEL

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Abstract

This study explores the job quality as a pivotal issue in the 21st century, and, at the same time, assigns it a key role in fostering social development and sustainability. The main approach of this paper is a qualitative one, although the author mainly refers to data from international organizations.

The author is currently working on these issues, both in terms of the development theory and in terms of empirical studies.

This study focuses on two issues, namely working conditions and the greening of work, both of which are going to impact the evolution of the job quality in the 21st century. The first issue relates to working conditions, as there is a compelling need to improve the quality of employment both in advanced and developing countries. The second issue focuses on the transition towards the green economy, the only possibility to relaunch development and to guarantee the environmental survival. This transition requires, at the same time, the production and the employment sectors to undergo a reconversion process.

This study is structured as follows. The first paragraph investigates the current working conditions and outlines some measures needed to improve the job quality; the second paragraph analyzes the job quality from the perspective of the greening economy.

In the first paragraph our analysis highlights that the measures needed to improve the working conditions lie in tackling unemployment in advanced and emerging countries and in promoting decent work for all. Although progress has been made in some cases, in many countries working conditions are still characterized by high levels of informality, working poverty and vulnerable employment. Making progress in these fields means upgrading the economic and social capabilities of workers and improving social protection institutions.

While investigating the difficulty of assigning a clear definition to the term "Green Job" (GB), this paragraph also shifts the research focus to those economic fields that fall into the area of interest of the Green Economy. The Green Economy can offer new development opportunities to advanced as well as emerging countries. Planning employment policies is a key strategy that facilitates development and investments within the Green Economy; indeed, the workforce employed in this sector needs to acquire specific job competencies that will further boost its growth.

The results of this paper shed light on the fact that while being a shared issue by both developed and developing countries, the job quality proves to be a driver for development. In addition, the policies in the field of job quality encompass measures such as social inclusion, support to women, education and equal opportunities, and therefore it is imperative that both the governments of developing and developed countries work consistently towards the implementation of such measures.

The conclusions of this paper show that the job quality in the 21st century sees a convergence between the Northern and Southern countries of the world. Both areas share the need to improve the qualitative and quantitative levels of employment, to eradicate poverty (which is endemic in the Southern part of the world and is still growing in emerging and advanced countries like China), to promote social inclusion among the weakest subjects of the job market and to make their industrial productions more environmentally sustainable (greening economy) by means of a suitable professional and technological conversion. Job quality is our common future.

Key words: *active labour market policies, development, decent work, green economy, social protection.*

Introduction

The study was undertaken to explore two issues that will define the job quality in the 21st century. The first issue relates to working conditions and it draws from the need to tackle unemployment and to improve the quality of employment. The second issue focuses on the transition towards the green economy (GE), the only possibility to relaunch development and to guarantee environmental survival, which, at the same time, requires employment to undergo a process of reconversion.

According to our study, quality jobs play a key role in fostering social development and sustainability, and all this is able to ensure a more equitable future to human beings (Standing 2009; Crouch 2013; Cingano 2014). As for this, the author is currently working on these issues both in terms of the development theory and in terms of empirical studies. In her research emerged, that leaving aside all the differences existing among each country, the growing need for a convergence in the job field is due to many factors:

- a) the current world is exposed to a turbulent transition and the balances of power are changing significantly (Bianco 2014a, Ch. 7); since countries are becoming more and more interdependent, common standards must be followed to regulate the world's markets;
- b) following the internal socio-demographic, economic and production changes that have occurred in advanced countries, the weak subjects of the job market (unemployed, NEET, women, immigrants, disabled people and active elders) and factors of weakness (need for a life-long training) have emerged (Bianco 2014b);
- c) the emerging economies must increase their investments in the field of employment policies to improve their domestic job markets, their occupational structure and the quality of the workforce (Bianco 2014c);
- d) the emerging global issues, pollution being one of them, pose a common challenge to the North and the South of the world in terms of development of new technologies and affirmation of new professions and occupations (such as the Green Jobs).

For all this kind of reasons the job quality is a driver for development (Bianco 2015). On the one hand, social development depends on the job quality and the services offered to citizens; on the other, a new problem is arising, namely the search for a new equilibrium where wealth, economic production and the protection of the ecosystem can successfully coexist. This is the challenge for the upcoming future and where the new social issue lies. It is, therefore, clear that the current, much debated issue of job quality is strictly connected to the quality of life, since they both depend on one another.

The interest in researching the job quality in the 21st century as a driver for development originates from several, interconnected reasons:

Firstly, the job quality issue shares common threads both with developed and developing countries. Indeed, it affects the development of advanced countries in the aftermath of the economic crisis as well as those developing countries that are now emerging.

Secondly, the policies relating to the job quality that are and implemented by the governments of both developed and developing countries are the same, as they encompass measures such as social inclusion, support to women, education and equal opportunities, just to cite a few.

Thirdly, the job quality is directly connected to the issue of new technologies, and therefore, it affects the quality of jobs.

Fourthly, the job quality in the 21st century sees a convergence between the Northern and Southern countries of the world. This is an interesting, yet fairly unexplored aspect, that both issues – the working conditions and the transition towards the GE – affect highly industrialized countries (Europe in particular) at the tail end of the crisis and with new social inequalities and socio-demographic differences, as well as emerging countries, whose future development is yet to be built for and ensured to their populations¹.

Both areas share the need to raise the quality and quantity levels of employment, eradicate poverty (which is endemic in the Southern part of the world and is still growing in emerging and advanced countries like China), promote social inclusion among the weakest subjects of the job market, make industrial productions more environmentally sustainable (greening economy) by means of a suitable professional and technological conversion.

This study is structured as follows: The first paragraph investigates the current working conditions in specific areas of the world (particularly in emerging and underdeveloped countries) and outlines some measures needed to improve the job quality. The second paragraph analyzes the job quality from the perspective of the greening economy. The connection between the two issues can be found in that the GE equals to producing in more advanced qualitative terms and, therefore, with a state of the art technology. As a consequence, this leads to overcoming the typical elements of informal economy, encompassing low production quality and job conditions that draw on labor weakness and vulnerability. Innovative productions require adequately trained labor and should offer more advanced working and social security conditions, pairing with the level of innovation provided². For example, in many developing countries the working conditions in the building sector as for environmental protection and safety and security in the workplace are very poor. Therefore, ensuring quality in this sector equals to having better buildings, not only because companies would comply with the rules of the building and the job sector, but also because they would invest in the quality of the materials used and in the workforce (as the earthquakes that hit Italy can teach us, Nudo 2012).

The Starting Situation

This first paragraph investigates the current working conditions. As a complex and multifaceted issue, job quality can be achieved by pursuing the following measures:

- a) Tackling unemployment, promote workers' employability and guarantee a stable income to workers and their families;
- b) provide the necessary conditions able to guarantee a decent job;
- c) turn work into an efficient tool, able to reduce poverty and social exclusion, and to ensure social protection for women, youth, foreigners, people with disabilities and the elders³, who are traditionally weak and marginalized subjects on the job market.

1 «[...] attention is focused on problems in the advanced economies – with record unemployment, recession conditions in Europe and risks of further deterioration in growth and contagion effects, should tail risks materialize», ILO 2013a, p. 42. See also IMF, 2014, Ch.2.

2 «[...] green jobs also need to be decent jobs – pairing concerns like efficiency and low emissions with traditional labor concerns including wages, career prospects, job security, occupational health and safety as well as other working conditions, and worker rights», UNEP, ILO, IOE, ITUC 2008, p. 39.

3 ILO 2014d. It is also worth mentioning, that the adoption of measures to promote employment and the incentives for a flexible workforce, reflect the need to tackle the increasing ageing population in advanced as well as in some emerging countries. Almost 200 million new jobs will be needed in the next five years to tackle this issue, with the *active ageing*, (Walker, 2006) being one of the strategies to be adopted.

Tackling unemployment, improving working conditions and promoting decent jobs identify the corresponding measures and the actions outlined by the Active Labour Market Policies (ALMPs) that are also demanded by international organizations. The primary aim of the “classical” ALMPs is to support the unemployed in re-entering the job market, to fight long-term unemployment by means of economic and legal tools and to assist first job seekers in their job search⁴. The problem of *unemployment* both in advanced and in emerging economies, is one of the worst problems and is linked to factors such as global economic trends, the employment structure and the quality of the workforce⁵.

Over the next five years there will be an estimated 213 million new labour market entrants, especially young unemployed who will have the opportunity to enter the job market. As it is known, young people are hardest hit by unemployment. Young people aged between 15-24 account for 25% of the global workforce, and during the economic crisis represented 40% of the unemployed. The ILO estimates that in 2013 the number of unemployed people aged 15-24 accounted for over 74 million; furthermore, the global youth unemployment rate has been increasing according to the following trend: 11.6% in 2007; 12.9% in 2012; 13.1% in 2013 (ILO 2013b).

The highest unemployment rate can be found in the Middle East and North Africa, where only one third of young people are employed. In addition, half of the young women living in this region are unemployed⁶. Developed countries, EU countries included, represent the areas where the highest youth unemployment rate between 2007 and 2012 can be found, accounting for 18.3% (ILO 2013b, p. 29; cf. also Bell, Blanchflower 2011). A peculiar aspect of this situation is represented by those people identified as NEET (Not engaged in Education, Employment or Training) (Fergusson 2013; Thompson 2011; Russell *et al.* 2011; ILO 2012).

Tackling unemployment also means protecting jobs, and this is of interest to individual workers as well as groups of workers (in case of collective dismissals), workers with stable jobs or fixed-term contracts, namely temporary workers. These types of measures represent one of the most controversial issues. Some argue that they would prevent companies from hiring workforce; others believe that guaranteeing stable jobs can lower the turnover costs for workers, who in turn would need to receive proper training after being selected and hired. Guaranteeing stable jobs would push companies to build a long-lasting work relationship with their workers and to invest in them through training and career development. In contrast, situations arise where the staff turnover is low, the job market is too rigid and group of workers divided into “insiders” and “outsiders” come to life.

As far as the working conditions are concerned, these are still characterized by informality, working poverty and vulnerable employment⁷, although progresses have been made in many countries⁸.

4 «Job creation is a priority in all countries [...]. In developed economies, job losses that disproportionately affect low-income workers contributed to increasing inequality. In emerging and developing economies, the creation of paid employment for those at the bottom helped reduce inequality in a number of cases. These findings confirm that the pursuit of full-employment policies is an important tool in reducing inequality», ILO, 2015, p. 61.

5 ILO, 2011a, 2011b, 2013b, 2013c, Ch.1, 2014a, pp. 25-26, p. 35, pp. 68 ff., pp. 76-80; IMF, 2013, pp. 153-157; ILO, OECD, 2013.

6 ILO, 2013a, pp. 83ff.; pp. 122-123; ILO, 2014a, pp. 29ff.; ILO, 2014c, p. XX.

7 It should be noted that the Millennium Development Goals (MDG), adopted by the world leaders in September 2000, include targets on informality, working poverty and vulnerable employment, with the aim of promoting «full and productive employment and decent work for all, including women and young people» (ILO, 2014a, p. 31). These interventions aim at setting the conditions to foster the economic and production systems of emerging countries, and at further expanding their positive trends of the beginning of this century. The quality of employment, for example, has been constantly and consistently improving. As a result, the share of vulnerable employment and working poverty in emerging countries has decreased and the living standards have improved, allowing the formation of that social segment that we define the middle class, although it is very diversified one.

8 ILO 2014c, pp. 38-39.

Informal employment is defined as a non-standardized type of employment in terms of: a) employment terms, conditions and performance standards resulting in unsafe working conditions; b) non-compliance with remuneration standards and social benefits such as pensions, sick pay and health insurance; this equals to an economic advantage for employers (who save up on a series of social costs) and a disadvantage for workers (who cannot fully enjoy their rights to social security); c) non-compliance with fiscal rules (informal employment is not recorded as part of the GDP) and environmental laws (employers gain an economic advantage in saving the costs for a correct disposal of waste and manufacturing scraps, thus imposing an environmental burden on the collectivity). Informal employment is especially widespread in low-income countries, where it ranges between 20 and 50% of total employment⁹. Informal employment is widespread for women and young people, and is not limited to backward or developing countries¹⁰. Indeed, it accounts for 20% of total employment, even in developed countries. Macroeconomic policies that focus on social and labour policies are needed in order to support the population and to tackle informal employment. This would allow to overcome the underground economic and production systems, already known as “structural heterogeneity”, in relation to the Southern countries of the world¹¹.

Working poverty is the condition of employed people whose income is not sufficient to exit poverty. The daily income per capita of the working poor ranges between US\$ 1.25 and US\$ 2. The ILO¹² estimates, that in 2013 more than 839 million workers were found in this condition – living with their families below the US\$2 poverty line – accounting for 26.7% of total employment. Although this number, in absolute terms, has been dropping since 2000, its degrowth has slowed down over the last years. *Working poverty* is an articulate issue. In fact, in terms of per-capita household consumption, the “extreme working poor” who live on less than US\$1.25 a day are followed by the “moderate working poor” (between US\$1.25 and US\$2), and the “near poor” (between US\$2 and US\$4)¹³. In the social stratification within developing countries, the last group is a newly established one as it has been growing bigger over the last decade and it is on the verge of leaving poverty and moving into middle class. It will be very interesting to keep track of the evolution of this class over the next years, as they are expected to be more promising from the perspective of economic growth.

Vulnerable employment is a form of employment where the working conditions and the quality of employment are particularly poor. Vulnerable employment is exposed to the economic and financial fluctuations, and it lacks of employment benefits and social security (this one being, for example, a difference with informal employment). Vulnerable employment comprises contributing family workers (for this reason, chances are higher for women to fall into this employment category) and own-account, self-employed workers. In such cases, workers

9 “Informal employment accounts [...] from 33 per cent in South Africa to 82 per cent in Mali in sub-Saharan Africa; in most of the South and East Asia (excluding China) it constitutes more than 60 per cent of total employment and ranges from 42 per cent in Thailand to 84 per cent in India, and in China, where the data is limited to six urban areas, the share of informal employment is about 33 per cent; in Latin American and Caribbean countries it ranges from 40 per cent in Uruguay to 75 per cent in Bolivia; and in North Africa and the Middle East it constitutes between about 58 per cent in the Occupied Palestinian Territory and 31 per cent in Turkey. In the agricultural sector, the proportions are significantly higher. In Eastern Europe and the Commonwealth of Independent States (CIS) the share of informal employment in total non-agricultural employment ranges from 6 per cent in Serbia to 20 per cent in Armenia», ILO, 2013c p. 97.

10 In Latin America, some countries have made progress in maintaining informality rates below 50% per cent of total employment, but some poor and low-income Central American countries experience rates of 70%. Informal employment is the most common type of employment found in South and South-East Asia, where rates reach up to 90 per cent of total employment (ILO, 2014a, pp. 12-13).

11 Nohlen, Sturm, 1982, pp. 92-116.

12 ILO 2014c, p. 38.

13 The social stratification of the wealthiest groups, as depicted by the ILO, appears as follows: the «middle class workers (between US\$4 and US\$13); and (5) above middle-class workers (otherwise called “developed world middle-class and above”, which are those workers living in households with per capita consumption greater than US\$13 per person per day)», ILO 2013a, pp. 40-41.

have no access to social security. Vulnerable workers remain trapped in the vicious circle of low productivity employment, low remuneration and limited investment capacities of their families in health and education, thus hampering the conditions for a potential development and growth, also for future generations¹⁴. In its World of Work Report 2014¹⁵, the ILO suggests that 1.5 billion people are engaged in vulnerable employment. The presence of vulnerable workers, especially in developing countries, slows down the growth of domestic consumption and national economies¹⁶.

After having identified the problems to be addressed in order to improve working conditions and promote a decent job, this second section pays attention to the conditions and means that are needed to achieve the abovementioned goals.

The first field of intervention relates to *wages*. Wages should be increased both for employees and autonomous workers; this would allow to overcome the different existing forms of underemployment that generate low productivity, and would enable those employed in the informal economy to enter the formal one¹⁷. Minimum wages represent a tool to safeguard workers' income, especially for the weakest ones, and recent studies have revealed its positive effects on employment¹⁸. It is difficult to establish an ideal standard level for minimum wages, as they vary from country to country. Nonetheless, it can be argued that in general terms and in the majority of countries, the minimum wage accounts for around 40 to 60% of the average income of the country of reference (ILO 2013c, Ch. 3).

The second field of intervention relates to working conditions, and specifically the *working time*. The standard working time, overtime work, night work and weekend work are generally stipulated in the law. The world's countries with a legislation establishing a 40-hour working week account for around 40%. In Asia, South America and Africa the working week is 48 hours (ILO 2014b, pp. 90ff.). Interestingly enough, the reduction of working hours in developed countries has historically represented a clear progress in the field of social development. Until a few years ago, especially in Europe, the reduction of working hours with the wage being unaltered has long been debated as an additional factor able to improve life and working conditions at a social level (Supiot 1995; Cette, Taddei, 1994). Only in recent times it has become apparent that reductions in working hours in developed countries are a sign of increasingly precarious employment relations (Dayan, 2002; Kümmerling, Lehdorff 2014).

Collective bargaining is another relevant topic. It plays a key role by virtue of its original purpose, namely organizing workers and representing them, and in view of the changes that the GE will demand. Trust unions are valid partners in the social dialogue, and have always offered a contribution in the development of employment policies. This contribution will be even more valuable in the adaption of employment within the process of greening the economy, as this century will require job skills that are in line with the new economic, productive and technological situation (Rustico, Tiraboschi 2010).

On top of the working conditions, attention should be also paid to social protection measures aiming at safeguarding wages and accessing welfare services. In order to make

14 «Together with data on vulnerable employment, this shows a clear need for improvements in productivity, sustainable structural transformation and expansion of social protection systems to ensure a basic social floor for the poor and vulnerable», ILO 2013a, p. 41.

15 Ibid., see also ILO, 2014b.

16 This phenomenon is especially found in developing region, like South-East Asia and the Pacific, South Asia, Latin America and the Caribbean, the Middle East, North Africa and Sub-Saharan Africa, ILO 2013a, p. 39.

17 In fact, «the share of wage and salaried employment in total employment reflects the share of workers in jobs outside the traditional economic activities such as low productivity subsistence agriculture or work in the crafts and trade sector in the informal economy», ILO 2014b, p. 74.

18 There are two different approaches to the issue of minimum wage. The first approach, a liberal one, holds that the minimum wage is inefficient, if not detrimental, as it does not reduce poverty levels and does not help low-skilled people in entering the job market (Neumark and Wascher, 1992). The second approach holds that the minimum wage can bring positive effects (Card, Krueger, 1995). For a brief overview, see Herr, Kazandziska, 2011, Ch. 2. See also ILO 2015, pp. 59ff.

welfare services available to all segments of the population, insurance coverage programs should be redesigned so that people can benefit from a wider access to such services. This issue is particularly relevant for those with the employment status of atypical workers, who have unstable jobs and whose career path is not conventional, and therefore cannot enjoy access to social security benefits. In other words, social protection institutions should provide protection in case of unemployment, sickness, maternity and accidents, all factors that negatively impact a stable income and the access to the job market¹⁹.

There are two distinct schools of thought over the influence that such measures have on the jobs market. The first school of thought, a liberal one, holds that such measures have a distortive effect (Freeman, 2009). The second one, on the contrary, holds that such measures are necessary on the grounds that the job market is imperfect and that “labour is not a commodity” (Deakin, 2011). Empirical evidence shows that the effects of social protection and labour institutions depend on the way they are conceived and developed (OECD, 2013). In order to be effective, social policies and labour policies in particular should be developed in a comprehensive way and in coherence with policy targets (Lee, McCann 2013). The corresponding implementation mechanisms should be clearly defined, especially for those countries where such mechanisms are weak.

The GE and the Greening of the Work

This paragraph looks at the job quality in reference to the process of greening the economy. The environmental issue and the problem of sustainable development are becoming increasingly pressing (World Commission on Environment and Development, 1987; Pearce, Markandya, Barbier, 1989; Harborth, 1992), and the last report of the IPCC has recently reaffirmed that we are approaching the point of no return²⁰.

Current technological advancements would allow for the so called ecological modernization (Røpke 2004; 2005; Häußling, 2014, pp. 279-313), thus initiating the greening of economy. GE is favorable both for the protection of environment and to boost employment in diverse economic and productive sectors. Renovating and upgrading plants, infrastructures and buildings so that environmental rules are complied with, and reforming the economic productions would bring about investments and, despite the skepticism surrounding it (Michaels, Murphy, 2009; Morriss, Bogart, Dorchak, Meiners, 2009), positive effects on the employment sector, regardless of the losses incurred by the traditional and most polluting sectors.

The GE can offer new development opportunities to advanced as well as emerging countries, as for the new job titles needed in the global employment market²¹. The planning of employment policies constitutes a further element of development and investment for the future. In particular, taking into account the labour market employment needs equals to identify the job

19 “Overall, the degree of “income security” which is provided through social protection institutions is a significant factor in determining labour market performance and workers’ well-being », ILO 2014b, p. 86.

20 «Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen», IPCC 2014, p. 5 «Anthropogenic greenhouse gas emissions have increased since the pre-industrial era driven largely by economic and population growth. From 2000 to 2010 emissions were the highest in history. Historical emissions have driven atmospheric concentrations of carbon dioxide, methane and nitrous oxide, to levels that are unprecedented in at least the last 800,000 years, leading to an uptake of energy by the climate system», Ibid., p. 8.

21 Particularly for developing countries, the advantage of this “self-centered” option, that focuses on the technology industries and the innovative skills of the green economy, can be found in meeting the domestic needs for consumption, employment and an improved economic and production structures, instead of meeting the needs of advanced countries, Senghaas, Menzel, 1979.

competencies needed in the future, like the ones that will be increasingly needed in the GE²². It is therefore essential to anticipate the global employment market demand, both to prevent a skill mismatch in the labour market (which refers to various types of imbalances between skills offered and skills needed in the job market²³) and to diversify the production capacity. Economic development needs, on the one hand, a strategy to diversify the economy; on the other, it requires businesses (including farming businesses in the process of increasing their efficiency) to create quality employment. In addition, policies for economic diversification, measures that foster companies to expand their businesses and stricter employment standards can make a valid contribution in the promotion of dignified employment.

While researching the difficulty of assigning a clear definition to the term “Green Job” (GB), this paragraph also shifts the research focus to those economic fields that fall into the area of interest of the GE.

It is not easy to define the concept of GJ²⁴. Generally speaking, a GJ contributes to preserve or restore the quality of the environment within the economic sectors, by means of cutting on the consumption of energy and raw materials and by reducing the greenhouse emissions. In so doing, the companies and the populations involved become more environmentally sustainable as they limit the risk of environmental pollution and desertification²⁵. It is difficult to provide a clear definition for GJ because specific green products or services are not necessarily derived from green production processes²⁶.

The analysis of the different sectors where the GE can be implemented will begin with the primary sector, which includes agriculture, forestry and fisheries. Since the beginning of mankind, *agriculture* has always been one of the most productive economic sectors, and will continue being so in future times, also taking into account the demographic growth expected in the next decades²⁷. Agriculture is the economic sector that employs the highest number of people²⁸. Agriculture is not a very profitable sector and, exception made for the multinational companies of the agroindustrial sector, those who live on agriculture are usually poor. In addition to this and considering the low profitability of agriculture, the use of natural resources tends to be irrational and improper, leading to soil degradation as well as to the loss of biodiversity and precious resources like water. Also, it shall be noted that agriculture is a polluting sector because of the high levels of greenhouse emissions that it produces, so it is imperative that it becomes environmentally sustainable. This goal can be achieved by supporting small farmers in poor countries, by promoting farming techniques that are environmentally sustainable, by using efficient technologies and by organizing a labour- intensive method of production.

Improving the working conditions within this sector means to make infrastructure and organizational investments, finance projects of rural development, tackle the excessively

22 UNEP, ILO, IOE, ITUC 2008; Mazzanti & Zoboli 2010; Martinez-Fernandez, Hinojosa, Miranda, 2010; ILO 2014b.

23 ILO 2013a, pp. 83ff., also pp. 122-123; McQuaid, Green, Danson 2006.

24 For a complete overview, cf. Bowen, pp. 3 ff.

25 «We define green jobs as work in agricultural, manufacturing, research and development (R&D), administrative, and service activities that contribute substantially to preserving or restoring environmental quality. Specifically, but not exclusively, this includes jobs that help to protect ecosystems and biodiversity; reduce energy, materials, and water consumption through high efficiency strategies; de-carbonize the economy; and minimize or altogether avoid generation of all forms of waste and pollution», UNEP, ILO, IOE, ITUC 2008, p. 3 and pp. 35-37.

26 «[...] green products and services produced in economic sectors, such as renewable energy or energy-efficient buildings, are not necessarily based on green production processes and technology, and vice versa», ILO 2012, p. 7.

27 «Current projections indicate that the world will need 70 per cent more food in 2050 (compared with 2000) for the anticipated 9.2 billion people. Achieving food security globally continues to be a challenge, not only for developing, but also for developed nations», ILO, 2012, p. 20

28 «With over 1 billion people employed in the sector, agriculture is the second greatest source of employment worldwide after services», <http://ilo.org/global/industries-and-sectors/agriculture-plantations-other-rural-sectors/lang--en/index.htm>

fragmented rural property (ILO 2012, Ch. 2), empower farmers with a technological know-how that is able to foster “green” practices, promote the creation of cooperatives. Brazil can already offer examples of such practices, having adopted low-carbon emission tools and environmentally sustainable agricultural methods (ILO 2012, p. 23). Improving the job quality in agriculture shall take into account that working in this field is extremely risky. Therefore, measures are needed to ensure safety and security in the workplace. In addition, it should be noted that agriculture is a labour intensive sector, and as a consequence it is essential to develop decent jobs. Other measures to promote the job quality in agriculture include: a) the implementation of social security measures for the communities that provide insurance coverage for natural disasters and that prevent them from falling into poverty; b) the promotion of equal opportunities, given the presence of a high number of women employed in this sector.

Forestry is another vital component of the primary sector and it houses a large number of renewable energy sources. For this reason, its degradation can lead to soil erosion, loss of biodiversity, damages to water bodies and an increase in the greenhouse effect. Forestry includes three sectors: agroforestry activities; woodworking; production of cellulose and paper. For many countries, forestry is a central economic sector and in total it supports at least 2 million jobs worldwide. The Brazilian policies provide examples for good work practices in the forests, for the improvement of working conditions and for the promotion of workers’ rights employed in this sector, such as freedom of association and the respect of indigenous communities. The number of hectares that are certified to be managed in a sustainable way serves as a basis to calculate the number of green jobs (GJS) that are generated (ILO 2012, Ch. 3).

Fishery is the primary source of proteic food for around one billion people in the world. This sector employs around 45 million people, 95% of which are employed in third world countries. One of the main problems concerning this sector is the protection of fish and the marine and coastal ecosystems. This sector has a major impact on employment, as it includes direct fishing activities, aquaculture breeding and fish processing. As a poor employment sector, fishery has traditionally faced low wages. Therefore, measures should be adopted in order to a) support the workforce with professional training programs; b) promote and finance specific projects to support small producers; c) foster the creation of cooperatives of small producers (ILO 2012, Ch. 4).

The analysis carried out so far shows that these sectors need to improve the quality of their working conditions and to upgrade their capital and their production processes in order to fully embrace the GE.

The *energy* industry, a sector where modern technology is essential to permit development, is central both for the evolution of economy and the ecosystem. The energy industry, and the renewable energy sector in particular, has grown rapidly over the last two decades, thus creating a higher number of jobs compared to the sector of fossil fuels (ILO 2012, Ch. 5). A large number of jobs are created in this sector and they undergo an ongoing process of modernization, being directly linked to technological evolution²⁹.

The *manufacturing* sector is also a GE target because it is responsible for: a) the consumption of above one fourth of the extracted resources; b) at least 35% of global electricity consumption; c) above 20% of CO₂ emissions; d) 10% of global water consumption; e) 17% of air polluting emissions (ILO, 2012, p. 96).

Empirical evidence shows that greening the manufacturing sector does not hamper the levels of employment, contrarily to what happens with the technological progress. With the

²⁹ «The experience at Solar Home Systems (SHS) in Bangladesh – where, to date, 1.2 million poor households have been equipped with photovoltaic panels and more than 60,000 jobs have been created (particularly among youth) and thousands of workers have received training (notably women) – demonstrates that significant poverty reduction, employment creation, health and educational benefits can be generated by shifting to renewable energy sources», ILO 2012, p. 75.

manufacturing sector being so vast, the greening process shall consist of a combined strategy, one that is oriented towards the supply and demand of goods and that encompasses the following:

- a. a complete recycling process for the goods produced;
- b. the increase of remanufacturing activities through the production of spare parts;
- c. reducing the energy needed in the production process;
- d. the use of environmentally sustainable raw materials and components;
- d. replacing pure raw materials with secondary raw material of steel, aluminum, iron and paper³⁰, something crucial in the process of making the economy environmentally sustainable³¹.

Recycling is another key sector within the GE. Worldwide, this sector employs 15-25 million people, mostly in informal and hazardous jobs where workers are exposed to toxins, toxic chemicals and the risks of infections. The number of people employed in formal recycling employment in industrialized countries is about 4 million, while it reaches 20 million in developing countries, mostly in the informal sector³². There are four categories of workers working in the informal economy: a) itinerant waste buyers who go door to door to collect waste materials; b) street waste pickers recovering secondary raw materials from mixed waste in the streets or communal bins; c) waste pickers who recover raw materials from dumps; d) waste pickers who live in shacks or near dumps. Developing this sector would result in energy savings and improvements of the working and living conditions of its workers. Recycling is a strategic sector, as it creates globally 11 billion tones of solid waste per year³³; also, considering that the world population is projected to increase until 2030, waste is also forecasted to grow.

The *building* sector is the largest emitter of greenhouse gases, meaning that it can play a major role in making buildings more energetically efficient (ILO 2012, Ch. 8; UNEP 2014, Ch. 2). Nowadays existing buildings do not comply with the criteria of environmental sustainability. In fact, while buildings in developed countries are old, in backward countries poor materials were used. Nevertheless, there still is a widespread opposition against sustainable building solutions because of the costs connected to such practices. Backward countries need to finance projects of social housing; developed countries, in turn, need to modernize their buildings. Yet, investing in sustainable building also equals to invest in the incomes of poor families, because it allows to save energy and to improve living conditions, as it is proven by the case of the Johannesburg Housing Company (ILO 2012, p. 132).

Sustainable building can create quality jobs. The building sector, indeed, has a high level of informality and poor working conditions. Sustainable building would make a considerable contribution in sustainable renovation and in improving the quality of employment. Indeed, sustainable building would need highly qualified workers, e.g. plumbers who are qualified to install devices to recycle and to heat water; carpenters who have the necessary skills to install isolation panels on roofs and walls. Other good employment opportunities would derive from the production of specific materials for isolation and paneling.

The *transport* sector is another relevant topic in this study, as it globally employs almost 90 million people in its different areas (construction; vehicles reparation; public transport, railway and aviation workers). This sector is one of the most polluting ones; it has a significant footprint on climate change and brings about a series of problems to the life of

30 For example, generating electricity by resorting to CHP (Combined Heat and Power) pp. 95-97. For further details see International Energy Agency (IEA). 2008.

31 ILO 2012, pp. 96-99.

32 Worldwide, the mid-point between the above-cited estimates of 15 and 26 million waste pickers is about 20 million, and the estimates for China, India and Latin America suggest that this figure may well be on target for global informal employment. The number employed in formal recycling employment is clearly much smaller, perhaps in the order of 4 million, based on data for Europe and the United States, as well as on the number of formal jobs in China. Accelerating urbanization in Africa and South Asia, along with growing amounts of recyclable material, are likely to increase future employment in this sector, ILO, 2012, p. 117.

33 ILO 2012, p. 112. See also UNEP, 2011a.

collectivity, traffic being only of them. It is a sector, where specific action is urgently needed, also considering the fact that emerging countries like China and India are expanding their transportation business. Making transport environmentally sustainable requires, on the one hand, building energy-efficient vehicles (hybrid or electric vehicles; vehicles or that run on alternative energy sources such as bioethanol); on the other hand, the use of public transport should be encouraged. The main emerging countries, such as Brazil, China and India, are indeed investing in infrastructures (railways in particular); likewise other countries like Africa, Mexico or Turkey are also following the same path (ILO 2012, p. 148).

Following an overview of the leading economic sectors and the challenges these sectors are confronted with in relation to the GE, it should be noted, that the transition into GE is somehow burdensome. While new employment would be created, the jobs linked to traditional economy and polluting sectors would disappear. Therefore, concerted and progressive actions should be taken in order to help low skilled workers and the elders to upgrade their skills through tailored training programs. This requires a social dialogue that involves companies, trust unions, the State and Governments. For such reasons, the role played by labour policies is crucial in terms of the following: a) the protection of income for those who remain unemployed, even temporarily; b) the support offered to job seekers or to workers who need specific assistance in transitioning from one job to another; c) training programs, skills and professional upgrading; d) social protection, namely a number of protection measures to protect the community.

Conclusions

It can be stated, that the job quality in the 21st century is expected to improve the working conditions and the life standard of economically backward and vulnerable groups (and this would already be a good result); at the same time, it will give occasion to implement a sustainable development model.

As it has been observed at the very beginning, these two elements – the bettering of working conditions and the implementation of a sustainable development model – affect developed as well as developing countries. Developed countries, and Europe in particular, are facing a crisis that creates new, profound social inequalities and socio-demographic disparities that can undermine democracy itself. In addition to this, the economic changes that have been occurring within developed countries have uncovered the weak subjects of the job market (NEET, women, immigrants, disabled people, active elders) and elements of weakness (the need for an on-going training), that need to be addressed with specific, tailored measures. Unemployment within emerging economies is linked to the factors such as global economic trends, the occupational structure and the quality of workforce. The emerging economies must increase their investments in the field of work policies to improve their domestic job markets, their occupational structure and the quality of the workforce. In both cases, social inclusion and equality should be increasingly promoted as they are proven to negatively affect the economic growth. Furthermore, the adoption of common standards and rules will be increasingly needed in the future because global interdependencies are growing. Concerted efforts must be made to ensure that social progress, in addition to production and economic returns, reach that side of the world that has long been excluded from them, and also the richest part of the world that today is facing big challenges in this field.

Global environmental issues, one of them being pollution, pose a common challenge to the North and the South of the world in terms of development of new technologies and affirmation of new professions and occupations (such as GJs). As it has been illustrated, the job quality closely binds together decent work and the Green Economy. Technological advancements and their implementation in the production processes are a breakthrough from the point of view of production, being environmentally sustainable, and from the point of view of workforce, being socially sustainable. To this effect, the GE is an advancement in the field

of job quality. More in general, we believe that this is the road map to be followed in order to create a fairer and more equitable society and to guarantee a decent future to the upcoming generations.

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