

Green Agriculture - features and agricultural policy measures for the transition to a sustainable agriculture

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Abstract: Agriculture is one of the most important economic activities in each country or area, as it is in close correlation with all other the other economic activities, in a whole which must be structured so as to achieve a more efficient planning and organization of the territory. The practice of a traditional agriculture, based on industrialization, affects the natural environment through emissions of pollutants, waste and deforestation which together affects biodiversity. Green Agriculture suppose to empower managers to widespread the use of fertilizers, to improve the crop rotation, to realize a more efficient water consumption, to improve the storage methods and the supply chain of products. Agricultural policies are closely inter-related with environmental policies as agricultural activities have a considerable influence on the environment. The efficiency of agricultural policies is reflected in monetary transfers between agriculture and other economic sectors, in the costs due to the reallocation of the resources between different agricultural and non-agricultural activities and in the realized gains. Currently there is a constant concern of the governments for the transition to a green agriculture, and most countries recognize the importance of achieving sustainable economic development.

Keywords: green agriculture, traditional agriculture, innovations, food and agricultural policy, subsidies, taxes.

JEL Classification: H23, K22, O21, Q11, Q12, Q13, Q17, Q18, R14

1. Introduction

Sustainable economic development is clearly an objective and indisputable requirement of the present society. An important element of this is the transition to another type of economy, more efficient and friendlier to the environment, the new green economy, which seeks to improve living conditions and to reduce social inequalities in the long run, to reduce negative externalities and market failures. All management strategies applied by individual decision-makers and also by the state in order to achieve economic growth, should take into account the concern for the resources of all kinds that which will be used by the future generations, by proposing changes in all economic sectors, which will have also the advantage of creating new jobs in emerging green areas.

This article aims to underline the importance to introduce the principles of green economy, which, along with other benefits obvious, has an important effect on the leaders, improving their image in the community. By reducing social ethical implications of the strategies they follow, they can be considered best representatives of "Corporate Social Responsibility". "Leading companies are increasingly adopting CSR as an integral element of their business strategies, recognizing that CSR can yield tangible business benefits. Such benefits include cost savings, greater" access to capital, enhanced productivity, enhanced product quality (through enhanced employee morale and better working conditions), attraction and retention of human resources, enhanced reputation and brand, and reduced legal liability" [4] "CSR can also increase the accountability and transparency of organizations to society through the use of a variety of communication instruments,

including stakeholder engagement, product information and reporting systems. Reporting trends today are moving towards the development of integrated environmental, social and governance reporting (see, for instance, the revision process by the Global Reporting Initiative (GRI) of its guidelines for sustainability reporting, available at www.globalreporting.org). In addition, international management standards such as the ISO 14000 series on environmental management and the recently adopted ISO 26000 on social responsibility offer an increasingly referenced framework for action." [10]

The paper presents the most important issues concerning the transition towards a green economy, covering all areas and important economic sectors in the new economic policy strategies, and individual management in: agriculture, fisheries, mining and manufacturing, construction of the green buildings, transport, tourism, finance and education. They are useful both internal and international cooperation actions between all the economic entities which are involved in this process, having discussions and decide strategies at the international level. Of course, the evaluation process of the opportunities for one or another economic policy strategy, the evaluation of the economic policy instruments are important, along with goals and with the issues related to the costs of their implementation relative to the time periods involved and with items related to the traditions and to the culture of each country, that are influencing the consumer behavior by creating a local specific.

One of the most important instruments of economic policies of the state is the adoption of a legislation that would facilitate this transition, including the regulation of

property rights. Are essential also the subsidies given by the State, which have the aim to promote the green innovation. The State can also support the loan process, allowing faster and more effective funding. In order to implement these goals, it is necessary to improve the calculation of all the macroeconomic indicators which are included in the System of National Accounts so that they reflect more and more the contribution of each sector in developing the principles of the green economy and the adoption of some measures by the States which can make these areas more attractive to those who are willing and able to invest. They have a basic role both Governments and non-governmental organizations, the private sector, including the small and medium managers and enterprises. Finally, a special importance is given at the changes in education and training of labor force.

2. Literature Review

In the book "Agricultural Subsidies in the Green Box, Ensuring Coherence with Sustainable Development Goals" [6], the authors Ricardo Melendez Ortiz, Cristophe Bellmann, Jonathan Hepburn stress that, considering the specific case of different states, there are numerous economic and extra-economic factors that can foster the transition towards a sustainable agriculture or, whether, it can slow it down: „By 2002, two Member States (Luxembourg and Finland) has just about all of their agricultural area enrolled in agri-environment schemes, and Sweden and Austria had over 80 per cent. No other Member State had more than 80 per cent (France). By, contrast, Netherlands and Greece had less than 5 per cent. The EU15

average was about 15 per cent (European Comission, 2005:7). These widely divergent figures reflect different historical practice (Austria, Finland and Sweden being the 1995 entrants with providing the EU Commisioner for Agriculture and Rural development from 1995 to 2004), topographical features, preferences and budget allocations, for rural development funding."

In "Green agriculture new technologies" [5], the author Irfan Ali Khan shows that worldwide it is necessary to make some changes in the strategies for the agricultural development, heading towards the green, sustainable agriculture: "After this prolonged dependence on inorganic and mineral components of agriculture growth there has been an increasing demand for rethinking agricultural growth strategy. Agriculture sustainability, soil degradation (soil productivity and soil structure), bio-diversity, impact on human health and on environment as a whole are the some of the concerns that are being raised for the reviewing part of the agricultural growth potential based on the current strategy. Search for alternates with the focus on the long-term sustainability of the agriculture has been enhanced in the last decade".

In the book "Sustainable use of Phosphorus" [8], the authors J.J. Schroder, D. Cordell, A.L. Smit, A. Rosemary stresses the importance of using with more efficiency and prudence all the chemical fertilizers in agriculture, because they are harmful both for soil and plants and animals and thereby affect food safety: "An important aspect of sustainable phosphorus use is that recovery of phosphorus from waste streams is not just needed to reduce water pollution, but for the sake of sustainability phosphorus must be recovered in an uncontaminated

and plant-available form... As sustainable phosphorus use will sooner or later become essential for global food security, action is needed."

In „Towards a Green Economy. Pathways to Sustainable Development and Poverty Eradication" [10], emphasizes the need for gradual transition of all states to green farming, which means a better involvement of all the agricultural producers, Governments and other economic subjects which are involved in this process, an improvement of the legislation. A particular importance has the State agricultural policy in which must be analyzed the costs of the transition and also the benefits resulted from it: „Green agriculture could nutritiously feed the global population up to 2050, if worldwide transition efforts are immediately initiated and this transition is carefully managed. This transformation should particularly focus on improving farm productivity of smallholder and family farms in regions where increasing population and food insecurity conditions are most severe. Rural job creation would accompany a green agriculture transition, as organic and other environmentally sustainable farming often generate more returns on labour than conventional agriculture. Local input supply chains and post-harvest processing systems would also generate new non-farm, value added enterprises and higher skilled jobs. Higher proportions of green agricultural input expenses would be retained within local and regional communities, and the increased use of locally sourced farm inputs would substitute for many imported agri-chemical inputs, helping to correct developing countries' foreign trade imbalances. Ecosystem services and natural capital assets would be improved by reduced

soil erosion and chemical pollution, higher crop and water productivity, and decreased deforestation. A greener agriculture has the potential to substantially reduce agricultural GHG emissions by annually sequestering nearly 6 billion tonnes of atmospheric CO₂. The cumulative effect of green agriculture in the long term will provide the adaptive resilience to climate-change impacts. Investments are needed to enhance and expand supply-side capacities, with farmer training, extension services, and demonstration projects focusing on green farming practices that are appropriate for specific local conditions and that support both men and women farmers. Investments in setting up and capacity building of rural enterprises are also required. Additional investment opportunities include scaling up production and diffusing green agricultural inputs (e.g. organic fertilisers, biopesticides, etc.), no-tillage cultivation equipment, and improved access to higher yielding and more resilient crop varieties and livestock. Investments in post-harvest storage handling and processing equipment, and improved market access infrastructures would be effective in reducing food losses and waste. In addition to production assets, investments are required to increase public institutional research and development in organic nutrient recovery, soil fertility dynamics, water productivity, crop and livestock diversity, biological and integrated pest management, and post-harvest loss reduction sciences. Secure land rights, and good governance, as well as infrastructure development (e.g. roads, electrification, the internet, etc.) are critical enabling conditions for success, especially in the rural sector and particularly in developing countries. These investments would have multiple benefits across a wide

range of green economy goals and enable the rapid transition to greener agriculture. Public policies are needed to provide agriculture subsidies that would help defray the initial transition costs.”

The author Mircea Duțu in “Environmental Public Policy” [3] stresses: “A major problem in the contemporary is the regulation of the agricultural biotechnology (headed by GMOs) so as to integrate the sustainable development requirements. Finding the balance between economic, social and environmental interests implies a transformation of the current formulas of production, consumption, life and interrelations..... The reasonable application, associated to a guarantee of the security in the development, application, exchange and transfer of biotechnology, become a component of the sustainable agriculture concept. “

3. Traditional agriculture versus green agriculture

Agriculture involves a series of production activities in areas with very different characteristics, activities that are very important because they are much more spread in the territory than the industrial activities or the services. Wherever the activities are located, there are some common elements, linked to the need to ensure an adequate complex of natural, social, economic conditions. In addition, all these activities require the development of behavioral patterns of producers. The gradual transformation of the agriculture from a traditional and industrial one to a green agriculture requires a series of efforts by the State and by the managers of the individual production activities from this branch. On the other hand, there are needed

some changes in the patterns of the population consumption of the agricultural products, that require some reforms in order to slow the degradation and the enhance of the natural production factor and, secondly, in order to help its more efficient use in production and to lead to a green consumption.

Agriculture should not be analyzed independently of the other economic activities of a country or area, but as an activity which is closely correlated with the other, aiming at a more efficient planning and organization of the territory. Increasing urbanization has had the effect of reducing the share of agriculture in the total national production, particularly in more developed countries. It remains, however, a fundamental economic sector because agriculture can provide feeding the population.

Traditional, industrial agriculture is using mostly inputs from non-agricultural sector, is energy-intensive and it's high productivity relies on chemical fertilizers and a high percentage of fixed capital which is used extensively. It results an increase of the negative effects of the production process on the environment. The practice of a traditional agriculture, based on industrialization, affects the natural environment through emissions of pollutants, waste and deforestation which together affect biodiversity.

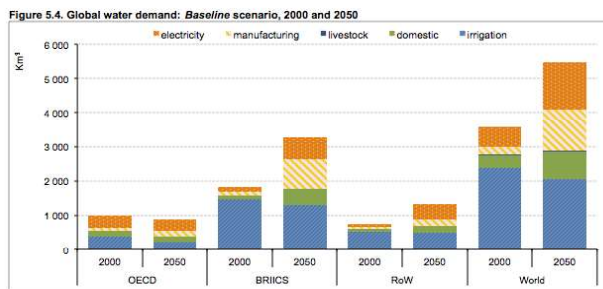
The share of the agriculture in GDP varies in 2013 from under 1% in high-income countries such as Germany, United Kingdom, Belgium, Luxembourg, Switzerland, Hong Kong, Singapore, Bahrain, United Arab Emirates, to a share above 25% in low-income countries such as Central African Republic, Ethiopia, Guinea Bissau, Kenya, Kiribati, Liberia, Madagascar, Nepal, Pakistan, Rwanda. Currently there are wide

differences between countries regarding labor productivity in agriculture. In the most developed countries, with the highest income, the labor productivity in agriculture was, in 2005, more than 90 times higher than in the countries with the lowest incomes and the gap is increasing. Although regarded as a general trend, productivity has been rising at the global level, it has not clearly determined the improvement of the standard of living of the population. In 2015, about 51 million children under five years were too weak for their age, representing an average of nearly 8% of all preschool children, with extreme differences between states (for example, in Bangladesh, this percentage reaches 51.5%).

Currently, losses caused by harmful substances, by problems of storage and distribution chain are high: from the daily production of 4,600 kcal/person/day are reaching in the consumption only 2,000 kcal/person/day. "In Africa, governments publicly committed in the Maputo Declaration of 2000 to spending 10 per cent of their GDP on agriculture, including rural infrastructure spending (UNESC ECA 2007). However, only eight countries had reached the agreed level by 2009 (CAADP 2009)." [10]

An important issue that must be improved is the water consumption in agriculture, especially the water used in irrigation.

Chart 1. Global water demand between 2000 and 2020



Note: this graph only measures blue water demand (see Box 5.1) and does not consider rainfed agriculture.

Source: <https://www.google.ro/search?q=uso+dell%27acqua+in+agricoltura&espv=2&biw=1152&bih=792&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwj0su7cqqLJAhVBsCwKHau2CilQsAQILQ#imgrc=iHrxIwALai4SfM%3A>

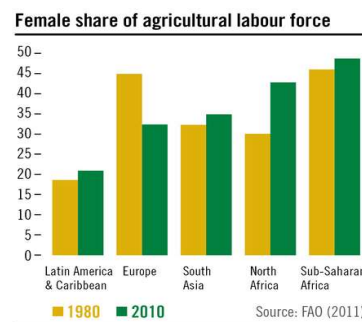
It should be noted, however, that only about one fifth of the total arable land is irrigated worldwide, but they, being more productive, makes about a third of global agricultural production. Irrigation is necessary not only in arid areas but also in those where heavy rain which desired to obtain a significant increase in the agricultural production and also in areas where there are large variations of rains from one period to another. Along with irrigation, desertification affects

very much the soil. Desertification is caused by climatic factors but also by improper irrigation, by an overexploitation of pastures, by distortions in the production and by needs caused by the international trade. Given the fact that desertification affects over 70% of total agricultural land and is present in approximately 100 countries, in 1996 the U.N. considered necessary to adopt a program to combat desertification, program which entered into force in the same year.

Along with the required improvements regarding the capital production factor, they are important also the improvements relating to the labor factor, not only qualitatively but also quantitatively and structurally. Because of the population migration from rural to urban areas, it was observed a worldwide prevalence of the female labor in agriculture. In

some countries these disparities are very disturbing. According to World Bank and FAO, in 2011 over 45% of the labor force in agriculture was represented by women in Sub-Saharan Africa. In general, the countries that are most affected by these processes are affected more also by climate change.

Chart 2. Female share of agricultural labor force in 1980 and 2010



Source: <https://www.google.ro/search?q=uso+dell%27acqua+in+agricultura&espv=2&biw=1152&bih=792&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwj0su7cqqLJAhVBsCwKHau2CiIQsAQILQ#tbm=isch&q=share+of+population+in+agriculture+&imgsrc=026Ek9X9oZRSIM%3A>

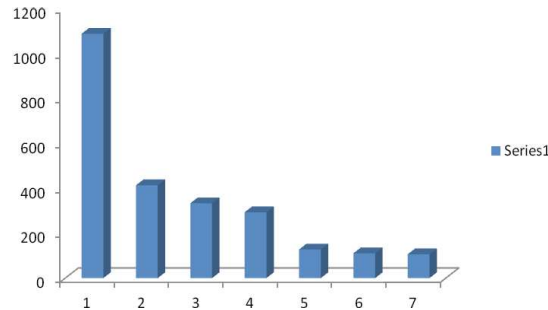
Migration from agriculture to other economic sector has both positive and negative effects. Among the positive effects, the most obvious are raising output and the rate of wages for migrant population. As negative effect, the most important is that this migration requires, for the labor force, a higher level of specialization, which is not feasible in practice for all individuals. As this phenomenon affects also the producers, the State has to adapt their development policies and economic growth to the new situation. In the sectors where goes the labor force which migrated from the agricultural sector, the individuals must demonstrate that they can adapt to a higher intensity and time of work, which are very different from those from

agricultural activities. Apart from internal migration in recent years, there is a increasing trend of the international migration of the labor force, with many characteristics, including migration from countries with a predominantly agrarian economy to countries with a developed industrial economy.

An important factor is the widespread migration from rural to urban areas, affecting very much the land because urbanization is producing soil cementation and is causing overexploitation of land.

The countries with the largest output in agriculture are, in 2015, in billions of US dollars, China (1088), India (413), EU (333), USA (293), Indonesia (127), Brazil (110), Nigeria (106).

Chart 3. Countries with the largest output in agriculture in 2015 (billions of US dollars)



1 = China, 2 = India, 3 = E.U., 4 = U.S.A., 5 = Indonesia, 6 = Brazil, 7 = Nigeria

Source: Processed by author

According to Umberto Toschi, agricultural activities are subject to both the influence of external and internal factors, among which: the irrigation system, the organization of the systems of production and distribution, providing bonuses to the purchase of certain areas of land, fixed capital used. John Harris Paterson identifies as basic socio-economic factors with negative influence: lack of capital, lack of leadership, faulty structure of land ownership, prejudice, ignorance [9].

Over time, in agriculture were made important changes on the organization and management of work, on the quantity and quality of cultivated areas. In the last two decades, it was observed a growing global trend to increase farm size and an increased concern for improving legal regulations on property titles.

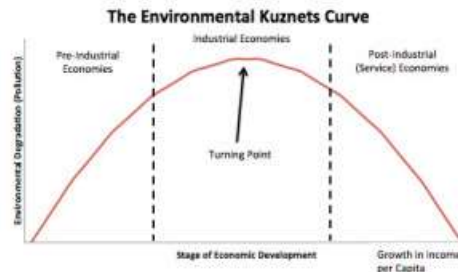
Today, we can talk about real agricultural systems, in which innovations have the

most important role and in which there is an increasing dependence and

complementarity to the industrial sector and services sector. Dependence refers to the trade with inputs and products and complementarity refers to the opportunity to work in parallel in agriculture and in one of another sector and to use the revenues earned in these different sectors. . "The way the world grows its food will have to change radically to better serve the poor and hungry if the world is to cope with a growing population and climate change while avoiding social breakdown and environmental collapse." [12].

It can also be defined the ambiantal economy analyzed by S. Kuznets, which attempts to internalize the negative externalities on the environment by using market mechanisms, in particular through the taxes.

Chart 4. The Environmental Kuznets Curve



Source: <https://www.google.ro/search?q=uso+dell%27acqua+in+agricoltura&espv=2&biw=1152&bih=792&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwj0su7cqqLJAhVBsCwKHau2CiIQsAQILQ#tbm=isch&q=curba+ambientala+a+lui+Kuznets++&imgsrc=coRkgj2itmqcZM%3A>

Environmental Kuznets curve illustrates the link between CO₂ emissions per unit of GDP and the GDP/capita. It is represented on a logarithmic scale and shows that up to a certain level of the income, the emissions rise as GDP growth, and above this level emissions are reduced by market forces as a result of monetary policy measures, in particular of the technical progress and of the reduction of the pollution costs. The main criticisms for this model refers to the fact that the curve was based on data collected from a group of countries, which do not allow specific analysis of each individual country and it does not take into account the irrevocability of some processes.

Green Agriculture means empowering managers to widespread the use of natural fertilizers, to improve the crop rotation, to improve the efficiency of the water consumption, to improve the storage methods and the supply production chain. The most important scientific research aims to select the most productive and resistant seeds, to improve the physical – climate limitations, to use a modern biotechnology system.

Green Agriculture allows to increase the nutritional factors and to ensure the products for consumption for a greater share of the world population, contributing to poverty

reduction. The changes required by the transition process to a green agriculture are the increasing of the investments for: “soil fertility management, more efficient and sustainable water use, crop and livestock diversification, biological plant and animal health management, an appropriate level of mechanisation, improving storage facilities especially for small farms and building upstream and downstream supply chains for businesses and trade. Capacity building efforts include expanding green agricultural extension services and facilitating improved market access for smallholder farmers and cooperatives.” [10]. In addition to the benefits that has the green agriculture on the environment should be taken into consideration the possibility to create new jobs in agriculture, the green jobs.

The managers must face not only to problems related to the production supply, but also to the demand and the consumption of these products. Consumption is significantly influenced by all the changes in the prices of agricultural products, which have a growing trend, especially in the last decade. This trend is largely due to the limitation of the land as a production factor, to the increasing water demand for ever more economic activities, the most affected being the

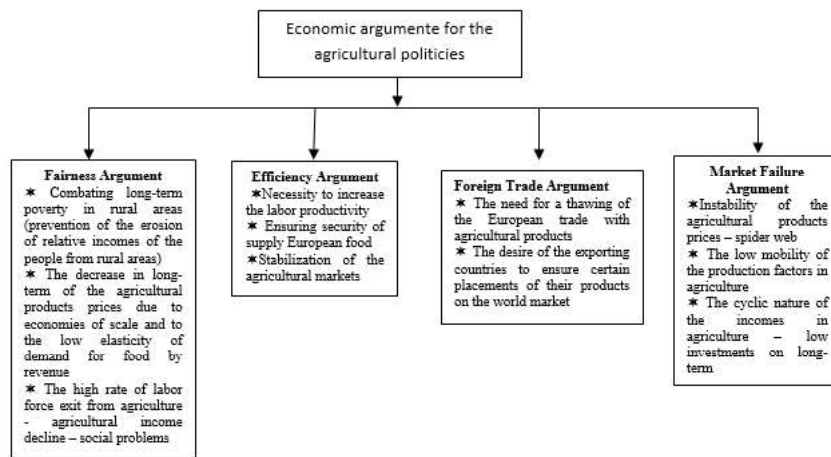
countries being those from Africa, South Asia and West South America. The consumption of agricultural products will change considerably until 2050, according to FAO studies, mainly due to the migration of population from rural areas to urban areas, which causes changes due to different diets, different lifestyle and different ways in which consumers have access to the food.

4. Agricultural policies for a modern and greener agriculture

Over time, the public authorities made numerous agrarian reforms that were necessary especially when there were serious imbalances between supply and demand of labor force in this field. Instead the traditional reforms, today States enact "rural planning", which refers at controlling natural environment, at the development of rural areas, at creating new jobs, at designing in the rural areas recreating activities for the urban population, at improving life standards of the rural population, at the urbanization

process control, at improving the access to jobs, markets and services, especially medical services and education. Public authorities should review the legal requirements so that, together with supporting green agriculture, improve the system of selling agricultural plant and animal products on domestic and international markets. Government expenditures dedicated to this sector should be increased, so that producers, especially the small and medium ones, can receive the necessary subsidies, and also measures relating to the demand for such products. Establish some incentives for farmers who reach the highest standards of products quality would also be important. However, it is generally observed worldwide, that in the economic policy decisions there is a reduction of the funds allocated to agriculture. The constant concern of Governments to promote the green, sustainable agriculture, nevertheless resulted in a growing trend of the organic crop to around 6% in 2010. In the European Union, these surfaces reached almost 10 million hectares in 2011.

Chart 4. Economic arguments justifying the existence of agricultural policies are [1] (page 131):



Source: C. Angelescu, C. Socol, "Politici economice. Politici de creștere economică. Politici sectoriale", Editura Economică, București, 2005, pag 131, ISBN 973-709-132-9 Source: C. Angelescu, C. Socol, "Politici economice. Politici de creștere economică. Politici sectoriale", Editura Economică, București, 2005, pag 131, ISBN 973-709-132-9

The efficiency of agricultural policies can be determined based on the economic or monetary transfers between sectors based on comparison of the costs involved by reallocating resources between different activities and realized gains from them. In particular, agricultural markets need state intervention

because they are characterized by a suboptimal allocation of the resources. The main tools that are State taxes/fees and subsidies, aiming to obtain positive effects on the agricultural production, the efficient functioning of the markets and the international trade with such products.

Figure 1: Global Trade in Organic Food and Drinks (1999-2009)



Source: The global market for organic food and drink, Organic Monitor, December 2010

Source: <https://www.google.ro/search?q=uso+dell%27acqua+in+agricoltura&espv=2&biw=1152&bih=792&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwj0su7cqLJAhVBsCwKHau2CiIQsAQILQ#tbm=isch&q=global+trade+in+organic+food+and+drinks&imgsrc=DNfOWJ7rbAsxbM%3A>

Through awareness-raising measures recently increased the global trade and the global consumption of organic products, sustainably produced food.

One of the measures of economic policy in this area, mostly practiced in developed countries is to support agricultural prices above the market equilibrium level, which determines an oversupply, while in developing countries States are pursuing support prices below the equilibrium price, which, however, causes an excess of the demand. To mitigate the negative effects, Governments must take parallel measures for facilities in lending process. The State may also adopt economic policy measures to guarantee the purchase by the State of the agricultural surplus goods at that price. In both cases, producers are more advantages than consumers and the State itself.

Subsidy policy covers multiple aspects such as [1] (page 139): “subsidizing producer prices, subsidizing production, setting the target price and compensation for producers to expand export capacity, subsidizing consumers, input-subsidizations in agricultural production.”

The State can intervene by adopting favorable policies regarding the agricultural credits through interest rate subsidies, which has the effect of increasing demand for loans or for credits or through the exchange rate policy in order to overvaluation of the exchange rate. Also, trade policy measures can be fixed in agricultural import taxes or import quotas.

The advantages of Romania, due to the existence of favorable natural conditions and suitable for a development of an agriculture based on ecological principles are diminished

by certain negative elements, mainly related to agricultural market mechanisms, to the large share of consumption, to the insufficient subsidies. These transformations suppose also some risks. Regarding Romania, it results from a study based on the regions of the country that there is: "a greater percentage of employees than for entrepreneurs who prefer a safe workplace but less well paid than one insecure but better paid. From this we can conclude that entrepreneurs are generally more oriented towards taking various risks involved in achieving higher incomes." [2] However, Romania's agricultural policy must adapt to the principles of the EU's agricultural policy.

Agricultural policies are closely inter-related with environmental policies in general because agricultural activities have considerable influence on the environment. Environmental policies have evolved from the bottom-up policies, in which a central role had the forces at local level at the top-down policies, where the key role lies on central bodies, and currently, at the multilevel governance policies, which involve a large number of companies, both local and central. Public policies on are using administrative techniques, which refers to norms, prohibitions, licensing and stimulating economic and fiscal instruments. In Romania, the first regulations of environmental policies dating from the fourteenth century, and after 1990, the first national strategy for sustainable development was developed between 1997-1999 which followed the National Development Plan 2007-2013 and later National Strategy for Sustainable Developing of Romania. Horizons 2013 - 2020 - 2030.

The first environmental concerns of the European Union's agricultural policies

have been included in the Green Book (Livre Vert) of the European Commission in 1985 which set aid for farmers which have a consistent activity with the requirements of the protection of the natural environment. The Maastricht Treaty of 1992 established the introduction of ecological principles in all EU economic policies. As a result, in the same year, the Common Agricultural Policy, CAP was reformed. In "Environmental Public Policy" [3], there are some of the principles from Regulation (EC) no. No 1782/2003 of 29 September 2003: "farmers who do not comply with certain requirements in the field of public health, animal health and plant health, environment and animal welfare are subject to reductions or exclusion from direct support." There are also emphasized the importance of bio-energy, efficient use of water and protection of biodiversity. In Regulation (EC) no. 73/2009 of 19 January 2009, are decided common rules for direct aid to farmers.

As outlined in the "OECD (2013), Policy Instruments to Support Green Growth in Agriculture, OECD Green Growth Studies" [11], although most countries recognize the importance of achieving sustainable economic development in conditions as environmentally friendly, there are not exist many consistent strategy in this area, and most of them are on a very long-term. Although each state has tried shaping their own strategies based on their specific conditions, it seems that the most important issues are the cooperation between all the domestic internal economic agents, and sometimes the lack of concern of the authorities which should carry out the established strategies. In addition, it was noted that in most countries has been achieved a preference for introducing some elements of the green economy, especially

in terms of renewable energy, but the focus was not on achieving economic growth in the context of transition towards a green economy. In some countries, economic policies for the transition to a green agriculture were not very well correlated with the other economic policies, so they have produced opposite of the desired effect in reality. It was also found, as a positive element in the OECD countries, that the new economic policy instruments widened their scope, targeting new fields such as informal areas and education.

The conditions from which starts Romania the process of modernizing agriculture are relatively weak. "Romania is still characterized by very high share of the population employed in agriculture (25.4%), which puts it in first place in the EU-28, far from the following countries ranked, Greece (13.0%) and Poland (11.2%)" [17]. On www.mediafax.ro, states that in the year 2013, Romania had 7.6% of the utilized agricultural area in the European Union, being surpassed by France with 16%, Spain 13.6%, UK 9.7% Germany 9.6% and Poland 8.3%. Romania holds about a third of the total number of agricultural holdings of respectively 3.63 million, more than Italy, Poland and Spain. The total utilized agricultural area in Romania in 2013 is 55.7% belonged to the farm unincorporated farms, such as family businesses, individual businesses and freelancers. Therefore, due to the insufficient funds, unutilized agricultural land in Romania amounts to about 1 million hectares. The average size of an agricultural farm in Romania is 3.6 hectares, four times lower than the EU average and much lower compared to other European countries: Czech Republic (152.4 hectares), UK (90.4 hectares) Italy (79 hectares), Germany (55.8 hectares), France (54 hectares) and Spain (24

hectares). The structure of the utilized agricultural area, 63% is agricultural land, pastures and meadows 33.7%, 2.3% permanent crops (perennial farms and orchards and grape-vine) and 1.2% gardens. At EU level, arable land has, on average, 60%, 34% pastures and meadows, permanent crops 6.1% and 0.2% gardens. In animals, Romania ranks fourth in the EU for sheep and goats, after the United Kingdom, Spain and Greece. For pigs, ranks ninth, after Germany, Spain, France, Denmark, the Netherlands, Poland, Italy and Belgium. Regarding animal husbandry, Romania is among the top ten countries in the EU cattle livestock.

Romania has a deficit of more than 2 million hectares irrigated and the productivity in agriculture is declining due to underutilization of production factors. Within the subsistence farms, farmers are not sufficiently motivated to improve production activity nor have the income necessary as gains from the sale of products are low. In 2011, State subsidies were 175 euro/ha, while the average European subsidies were 270 - 300 euro/ha.

Some significant achievements have been noted, however, on organic farming "organic products have a high potential in Romania, because a large area of land can be converted for the cultivation of bio products and because Europeans consume increasingly more healthy products. In Romania, the area cultivated with organic products is over 70,000 hectares in 2006, so less than 1% of the country's agricultural potential. This is despite the fact that, according to studies, Romania could produce organically around 10-15% of agricultural land. The area cultivated with organic vegetables was 300 hectares in 2009 and 259 hectares in 2008. The area

cultivated with ecological fruit trees was 820 hectares in 2009 to 790 hectares in 2008. The total area under organic farming in 2008 was 221 410 ha, compared to 190,129 hectares in 2007. In 2011, organic farming area increased from 260,000 hectares to 300,000 hectares of arable land is just lower than 100,000 hectares. Exports of organic products from Romania increased in 2010, reaching a record level of 100 million euro, against 80 million in 2009. In Europe, Spain is in first place in the bio cultivated surfaces, with 1, 33 million hectares, exceeding Italy, with 1.1 million hectares, the Netherlands, with businesses in organic agriculture of 647 million in 2009, increasing with 11% compared to 2008. "[19] In relation to trade of agricultural products, states: "In 2010, Romania sold abroad needs, 8.5 million tons of food and agriculture, especially grain and tobacco. There have been exported two million tons of maize for a total of 388 million euro, 2.5 million tons of wheat to 380 million euro, one million tons of rapeseed for 334 million euro and 23 thousand tons of tobacco for EUR 380 million. In 2011 Romania exported food products worth a total of 2.9 billion euro and imported food of 3.7 billion. "[19]

The Common Agricultural Policy, CAP for 2014-2020 aims to consolidate its position in Romania and increasing economic role of farmers by ensuring fair competition in the common market, by ensuring increased earnings from production, by ensuring them that they can provide a number of different types of services that are required in the market, in the frame of the rural planning. Structural policies that relate to changing the organization and functioning of the common market are [13]: a better functioning of the markets, stability and greater transparency;

strengthening the position of farmers within the food chain; measures to improve the competitive position of farmers; maintenance payments to support farmers in disadvantaged areas and some areas clearly defined; more incentives for farmers in the aim that they provide more rural services valued by society; strengthening measures for farmers to have an important role to new challenges, such as climate change and hydrological constraints.

Romania's agricultural policy provides increasing amounts used in the State budget for the agriculture so that farmers can benefit from direct payments updated to their European level. An important issue is to ensure food security, according to world standards, along with environmental protection and animal welfare. The state must identify new intervention measures, including simplification of cross-compliance standards and improve their direct support to farmers, focusing on small and medium firms. Agriculture is important [from the perspective of labor, given the fact that agriculture employs over 30 million people, and over 40 million people in the food chain. In the rural planning, in addition to the measures generally available worldwide, in our country are important also the measures for unifying the land, given that the land property is broken, the provision by the State of more money for the scientific research and the development of new agricultural technologies.

6. Conclusions

The transition to a different type of economy, more efficient and environmentally friendly, to the green economy, is obviously an objective and indisputable requirement

of the companies. Management strategies applied by private operators or the State in order to achieve economic growth should carefully consider the resources that will benefit future generations. In order to switch to a green economy, it is necessary to adopt new economic policy strategies covering all fields and industries. It is particularly important internal cooperation between all those involved in the implementation of these goals and the establishment of agreements between EU Member States and of international agreements.

Agriculture should not be viewed independently of the other economic activities of a country or area, but as an activity which is closely correlated with the other because it is the basis for ensuring population's food. An agricultural development requires a more efficient planning and organization of the territory, as well as measures to reduce the negative effects of increasing urbanization, particularly in high developed countries.

While in agriculture were important changes on the most important aspects of the organization and management, on the quantity and the quality of cultivated areas it is required the adoption of new legal regulations on property titles. Currently, we believe that the work is so complex that agricultural systems are based on the innovation process and

increasing dependency and complementarity towards industry and services.

Green Agriculture involves empowering managers to widespread the use of natural fertilizers, to improve the crop rotation, to make more efficient the water consumption, to improved storage methods and supply chain of products. The most important concerns relate to the scientific research in order to select the most productive and resistant seeds and to improve physical and climate constraints, the use of modern biotechnology systems.

Green agriculture will allow increasing the nutritional factors from the consumed products and will ensure the needs of a greater share of the world population, contributing to poverty reduction. Making changes necessitated by the transition to a green agriculture requires an increased investment. The Governments concern to promote green agriculture are reflected in policy measures adopted of which the most important are: supporting agricultural prices, soft loans, guaranteeing purchase by State of the surplus of agricultural goods at a certain price supported by State, subsidizing producer prices, subsidizing production, setting the target price and the compensation for producers, consumers subsidize, subsidize agricultural production inputs.

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