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Romania, Factor 6: Sustainable Agriculture

Romania: Sustainable Agriculture Continues to Impact Romania's Crops

The nation of Romania is composed of a plateau in the east, central Transylvanian Basin; both landscapes are separated by mountains in the east and south, and it is located near the Black Sea. There are many natural disasters that can occur in the area. The natural disasters that occur are earthquakes, which take place in the south, southwest area and another natural disaster would be landslides. They have a population of 21,790,479, as of July 2013. Sectors are divided amongst; 51.8 percent in services, 37.4 percent in industry and 10.8 percent in agriculture, respectively (Central Intelligence Agency). The society is based on hierarchy and they respect age and a person's position. The person who is eldest or has the highest position is expected to make decisions for the group, as long they are for the best interest of the group. Expectations are that people use a person's surname and title when addressing them, unless they say otherwise (Romania- Language, Culture, Customs and Etiquette).

In Romania, family is an important social foundation and is a form of stability. The father is in charge of the family; patriarchal structure (Romania- Language, Culture, Customs and Etiquette). Romania has an average of three people per household (All-Island Research Observatory). There is social assistance in place for all families. The assistance focuses on benefits that create returning to work easier for parents. Insufficient care service for children still exists in Romania (European Union).

More than 50 percent of all mothers, who have children under the age of six, are employed. Since 2012, 56.5 percent of all mothers are employed versus the 59.1 percent on the European Union level. In 2011, childcare was available for only two percent of children under age three. Formal childcare available for children between three years old and school age was 41 percent, which puts Romania below the Barcelona targets and European Union-28 averages of 30 percent and 83 percent, respectively (European Union).

The legislation has the intended purpose of improving living standards of families who have children. Romania has equally provided social assistance and services, education, health, and housing services. However, families must fulfill the legal criteria to receive all beneficiaries. Local authorities are responsible for the coverage of those services, which depend upon the availability at a local level. Central level is in charge of distributing financial resources from state budget to organizations that provide services (European Union).

Currently, Romania is drafting a new government strategy for protection and children's rights. This will be based on comprehensive approaches in social services, education, and health. To insure children's rights, inter-institutional cooperation is important between the involvement of the NGO sector and ministries. Romania's government plans on continuing implementation of projects with the National Interest Programs. The National Interest Program is in charge of closing old institutions, extending family-related services, and housing. The European Union also co-finances the projects to help with preventing the separation of children from family (European Union).

Romania plans, in the years to come, to promote and implement a package of community services. This will help ensure efficient protection to vulnerable children. Specialists will coordinate activities in areas, such as health, education and social services, which focus on preventing children and families being separated. Investments in community based services are considered a solution, supporting both the interest of the children and family and is more cost efficient. This could lead costs from institutional care to decrease (European Union).

The quality of a diet in Romania is affected by financial status. The middle class along with the lower classes are not able to buy pasteurized milk, therefore; before they consume milk it must be boiled (Brasov Visitor).

The upper class is able to buy a higher quality of food. The upper class in Romania has the money to purchase anything they want. They are able to purchase higher quality cuts of both beef and pork on a regular basis, plus fish. They can also afford to drink pasteurized milk. They are more apt to buy chocolate spread for their children along with sweets. (Brasov Visitor).

Families in the middle class have a substantially reduced diet. After they pay rent, bills, and credit owed to the bank, the money left over is a lot less compared to the upper classes. However, the quality of their diet is slightly better because they eat more fresh food, such as, vegetables and fruit. The downside to their diet is they do not buy much meat. If they do buy meat it is of a lower quality and consists mainly of fat not protein, such as, sausage and minced beef. Their breakfast usually consists of bread with butter and jam along with coffee since they can't really afford much more (Brasov Visitor).

Families living outside of the city and traveling to work from rural areas have less money because of traveling expense costs. They have their own plot of land where they are able to grow their own vegetables and fruit. They can make foods with butterbeans, which is higher in fiber and essentially important in maintaining a healthy digestive system. These families can eat chickens and other animals they raise, providing them with their own source of meat (Brasov Visitor).

In Romania, there is a high consumption of chicken because of the high chicken population, purchasing the meat is relatively inexpensive. The lower and middle classes normally only consume pork during times of festivity. Many children who live in the villages never eat sweets or have ice-cream because it is a luxury that they cannot afford. The majority of the villagers own cherry trees in their gardens which allows them to sell the cherries but they sell for very cheap. Romanian diets are healthy because they eat large amounts of fresh food. This means it is lower in preservatives, chemicals, lower in additives, and higher in vitamins and minerals (Brasov Visitor).

In the past few years, the consumer and processed food is becoming more available. This has impacted the diet of the upper class because the quality of their diet has been influenced by processed foods. Processed foods contain: fewer vitamins and minerals and lose consistency. Another reason this affects the upper class is due to their diet consisting of sugar, salt, and additives, this would be in a much higher amount than the lower and middle classes (Brasov Visitor).

Employment rates of men and women are lower than the European Union's average of 66.5 percent and 52.6 percent, respectively. The European Union-28 in 2012 averaged 58.5 percent for women and 69.6 percent for men. Fewer women are working part time at 11.1 percent compared to European Union-28 at 32.5 percent, in 2012. The gender pay gap in 2010 was 9.7 percent compared to European Union-27, in 2011, averaging 16.2 percent (European Union).

Romanian currency is known as, leu. Their currency used to be ROL leu but now it is RON leu (Trading Economics). One RON leu is 3.25, which equals the same as one United States dollar bill (Currency Converter). Since January 2014, the average monthly wages dropped to 2,250 RON leu, originally monthly wages were 2,430 RON leu (Trading Economics). The equivalent of 2,250 RON leu is 693.08 in US Dollars. Wages in manufacturing are 2,046 RON leu, which is the equivalent of 629.92 US Dollars (Currency Converter).

Romania's main issue is sustainable agriculture, which may start to worsen if it is not helped. Sustainable agriculture is to make the efficient use of resources, such as, water. Romania's variability and the affect climate has on sustainable agriculture must be addressed. There is increased agricultural pollution and many of the landscapes have deteriorated. Extreme weather causes the greatest losses in the agricultural industry;

causing the reorientation of research in the area. Soil, climate, the size of households, crop rotation, and combating weeds and pests, must be taken into account, as well (Strategies Regarding the Sustainable Development of Agriculture in Romania in Terms of Climate Risk).

The crops grown in Romania consist of corn, sugar beets, barley, wheat, potatoes, grapes, and sunflowers; used for the seeds. They raise chickens for their eggs along with raising sheep (Central Intelligence Agency). There are a large number of farms, in Romania, that participate in the marketing of fiber, food, and raw material for energies and industrial products (MPRA). Their industry consists of textile, footwear, mining, timber, construction materials, chemicals, petroleum refining, and electric machinery, light machinery, auto assembly, and equipment (Central Intelligence Agency).

Romania still requires extensive research; but they have a wheat variety to be resistant to yellow rust known as, "Alex," (Strategies Regarding the Sustainable Development of Agriculture in Romania in Terms of Climate Risk).

Another issue is global warming and the depletion of energy sources. Biofuels are now being introduced in the hopes of decreasing pollution from the emission of petroleum and reducing carbon dioxide (Strategies Regarding the Sustainable Development of Agriculture in Romania in Terms of Climate Risk).

To accomplish this task based on the issues identified within this paper, I believe that addressing the concerns will require a multiple approach.

First and foremost, a review and implementation of sustainable agriculture through financial support will provide the first level of improvement to the society of Romania. Emphasis on financial support will provide all citizens equal access to get the equipment they need most. There would be money to help acquire new technologies, machinery, varieties and hybrids, and chemical fertilizers (Strategies Regarding the Sustainable Development of Agriculture in Romania in Terms of Climate Risk). There are programs that help with financing alternatives in Romania's agriculture, such as the National Program for Rural Development. The Agency of Payments and Intervention for Agriculture (APIA) is in charge of direct payments for agriculture projects. (Daily News)

The second component of an economic plan will be crop production. Climate must also be addressed because of the way it affects the agriculture industry more than any other sector in Romania. The climate fluctuations influence crop production, greatly. Eastern and Central Europe have seen a decrease in the amount of rainfall, especially in the summer season. This requires the structure of crops to be improved genetically. The crops must have a higher tolerance against water stress and towards the higher temperatures. Their most vulnerable crops are mainly annual crops, such as, grain and weeding crops (Strategies Regarding the Sustainable Development of Agriculture in Romania in Terms of Climate Risk).

Projects that would help with the climate changes affecting their sustainable agriculture would be the European project known as, INTERREG IIIB CADSES: ACRETE- "Agriculture and Climate Change: how to Reduce Human Effects and Threats. Romania has attended this through, National Meteorological Administration, where they developed a "Code of Attitudes to reduce the impact of climate change in agriculture." This document has some recommendations for adapting agricultural technologies and activities of agricultural production. This process is to improve and combat the climate change effects (Strategies Regarding the Sustainable Development of Agriculture in Romania in Terms of Climate Risk).

The third component is crop sequence, which is an effective way for farmers to protect the productive potential of soil, which will help ensure constant production. Opportunities that would help establish a sustainable management system are: adaptability of genotypes, directing effects on physical properties of the crops, chemical properties, biological properties of the soil, protecting against soil erosion, and runoff and

information on surface crust to maintain agricultural production (Strategies Regarding the Sustainable Development of Agriculture in Romania in Terms of Climate Risk).

The use of crop production will keep the balance between permanent crops in relation to annual crops and will help prevent pollution through streaming and water percolation in the case of irrigated crops. Some recommendations are to cultivate selected varieties through the correlation of environmental conditions. These selected varieties would have a degree of resistance against: drought, moisture, high temperature, cold, and frost; respectively (Strategies Regarding the Sustainable Development of Agriculture in Romania in Terms of Climate Risk).

Management of crops and rational land use are necessary to maintain the production potential and to maintain low impact on the environment and climate. Choose genotypes with tolerance to heat, drought, and excess or lack of moisture. Cultivating hybrids and using them with different vegetation periods, which would be a better use when it comes to the climatic conditions (Strategies Regarding the Sustainable Development of Agriculture in Romania in Terms of Climate Risk).

To effectively manage renewable energy resources, installing solar panels to heat water and their homes would help cut gas emissions. This would help lead to the transition from fossil fuels to renewable energy resources (Strategies Regarding the Sustainable Development of Agriculture in Romania in Terms of Climate Risk).

The implementation of one and/ or all of the recommendations will lead to a more stable, healthier society. They can focus on their economic development rather than just trying to survive.

In order for Romania to achieve a stable sustainable agriculture, changes have to be made, while progress is being made to improve their sustainable agriculture through improving plants resistances. Climate is another important factor, which has quite an impact on Romania's sustainable agriculture. More research would be important to help Romania combat issues in sustainable agriculture. They need to learn how to adapt certain agricultural practices. If Romania had the means of buying machinery, they could be introduced to crop rotation. Childcare issues must also be addressed because if families could find adequate healthcare both parents could seek employment thus increasing their household incomes.

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