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The Impact of Development in Forestry Related Activities on Local Economy

Florin-Octavian MATEI¹

Abstract

The forests are a very important natural resource for Romania, but forestry has not have just the harvesting wood activity, is also have secondary activities with a local social and economic impact, because of the regional specification of those products. Fish farming, forest fruit and mushrooms, medicinal plants, wood seeds, ornamental trees, hunting and recreational activities, all those activities can have an influence on local economy, bringing tourists and selling products for a higher price and can be done locally and only in small activities.

Keywords: *forest products, forestry, local economy, development.*

1. Introduction

My motivation to choose and make an analyze for forestry related activities on local economy is to present a situation in Romania about those activities in comparison with other European countries, the impact that is giving to the local communities and to find out the necessity of developing those activities for helping people from their community to grow and have a better life style, also to make a research about how it's done at the moment and the opportunities from programs to develop a sustainable forestry for the related activities.

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2. Data research

Romania owns at this moment 6.55 million hectare in the administration of forest fund, which represents 27.5 percent from the entire surface of the country. The income generated by all forestry activities in 2015 has been 2.1 billion lei, which is around 0.25 percent from GDP, but only 250 million lei of revenue is coming from forestry related activities.

Forestry related activities are compound out of fish farming, forest fruits, wild mushrooms, medicinal plants, wood seeds, ornamental trees, hunting and recreational activities.

The forest fund is owned in 64.8 percent by the state and in public administration and 35.2 percent is owned by private people, companies and authorities. In Romania are authorised 468 forestry authorities, 322 authorities are part of the National Forestry Organisation Romsilva, 146 authorities are locally established, 3 authorities are part of National Institute of Research and Development in Forestry „Marin Dracea” and 1 authority is part of the Administration of Protocol Patrimony of State.

The forestry authorities have the role to manage and ensure forestry services for protection and sustainable development.

In 1991, the appliance of Law Nr. 18 permitted to give back to the owners or to their successor the property rights in limit of 1 hectare for every individual owners who owned forest lands or forest vegetation. Romsilva had the obligation to deliver to local communities the rights for the forest until the validation for the new owners. The provision it was without support because of the lack of forestry legislation which had the effects of deforestation in order to have financial benefits or individuals that didn't have forests but where part of associative forms of ownership have asked for returning forests and they've managed to receive. In the base of Law Nr. 18 from 1991 the political vision was to give back 400 000 hectare of forest to maximum 400 000 former owners. The Law Nr. 169 from 1997 comes with the modification of the surface that can be returned to former owners to a maximum 30 hectare of forest for every family, but is conditioning the return by building and applying a viable formula of administration in forestry regime.

Law Nr. 1 from 2000 about restoration the rights of property over agriculture and forestry lands had the characteristics of returning a maximum 10 hectare of land for every individual, it was raised up the number of archaic associative properties, the articles mentioned for refund to be made in 90 days and if it was necessarily to refund 30 hectare the difference to be taken from church forest lands. The changes that come with Law Nr. 1 from

2000 mentions that the refund of forest lands from national property to private property will be made after creating in territory of the control structures and appliance of forestry regime and only after laws about forestry contraventions, forestry regime and administration of forestry fund in private property or national property and rules of forestry employees. The law had flaws, so in 2001 the government came up with OUG Nr. 102 to help out and clarify some aspects of Law Nr.1, but county commissions had validated the refund applications and they can not be canceled on administrative way, the local authorities not having the blame and considerate the policy of accomplished fact.

After time, this laws about refunding old owners rights to them and for they're successors have fragmented the forest lands very much and without forestry laws that have been necesarily in order for reglementation for forest owners much of the forest have been cut down in order to maximise the profit and taking advantage of the flaws that was in forestry laws.

A very important information gived by Romsilva mentions that the forest with an important role in protection of soil, water, agains diseases, with role in recreation and protected areas, but also with a scientific role where protected against refund laws and they where kept in national property.

3. Economy results

Forest fruits is one of the product that the forests offers with important role in peoples health because of minerals and vitamins are in the composition. The economy results offered by the National Institute of Statistics reveals that forest fruits sector as an activity for forestry units is in 2015 at 3481 tones of forest fruits, after in 2014 they've managed to collect 3908 tones. By the year 2008 the forestry units collected 4413 tones of forest fruits and the biggest amount they collect was in 2010, where they've collected 6562 tones, slightly decreasing to year 2012 at 4471 tones and and increase in 2013 to 5397 tones. The data reveals that from year 2008 and to 2015 they were big differences between the quantities collected by forestry units in order to be valued. The problem is that Romania didn't develop units where the forest fruit can be stored in order for protection until they were sold, so it was need it to sell them quickly before depreceation of quality products.

Because of the oportunity offered by forest fruits, the quantities asked by the markets and good margins offered by bigger prices, some of the farmers have targeted forest fruits cultures into specialized farms, where

they apply treatment in order to obtain good production to be sold. Because of the particularity of this type of farm, the data about quantities and revenues is not available for the moment.

Forest fruits are usually found on the market as fresh, juices and teas.

Truffles and edible mushrooms from forests is another sector of production by forestry units with high revenues. Data from National Institute of Statistics shows that in 2008 Romania had a production of 312 tones of truffles and edible mushrooms, in 2009 the production was more than double, the production been to 672 tones, year 2012 can be a year of reference as a performance for production of truffles and edible mushrooms, the quantity harvested was at 771 tones. For the last 3 years, from 2013 to 2015 the production has a slightly decrease, from 608 tones in 2013 to 542 tones in 2015.

From other vegetable products, including medicinal and flavored plants, juices and resin the income generated for forestry units had an increase from 2008 to 2015, from 2.7 millions lei generated in 2008 to a small decrease to 2 millions lei in 2009 and growth up to 4.6 millions lei in 2013, for the final of the year 2015 the income generated to be at 3.2 millions lei.

The hunting sector of forestry units had registered a decrease over the years, a cause can be the non-governmental organisations that fought for wild animal protection and on the other hand can be the effective of wild animals existing in the forests. From an income of 15 millions lei generated in 2008, in 2009 the income gone to almost a half of last year, generating 8.1 millions lei in 2009 and decreasing to 5.9 millions lei in 2015. The hunting sector is generating income from recreational activity of hunting and from the activity of processing wild animals meat and other products generated for consumption.

Fish farming is an important sector activity for a part of forestry units, here we include only trout harvesting for consumption from mountain waters and farms, also other fishes growth in arranged ponds and lakes and spawn and caviar sold on the market. The data collected from National Institute of Statistics reveals that fish farming sector registered an increase from 2008 to 2015, from 8.9 millions lei income registered in 2008 to 11 millions lei income generated in 2015.

In year 2005, Romania has a surface of 100025 hectare of fisheries, from this surface 84 percent is arranged as fish farms and 16 percent arranged as fish nurseries. The licensing from National Agency of Fishing and Aquaculture indicates that in 2011 was licensed a surface of 98232 hectare and in 2012 the surface licensed was 95229 hectare, which indicates a drop of the surface licensed for fish farms and a collapse of the surface used.

All the fish farms are registered in the Units Register of Aquaculture from National Agency of Fishing and Aquaculture. The Register statistics indicates that in 2005 were registered 381 companies with fishing activity and a number of 166 that has also fish nursery and the data from 2012 indicates that the fish farms registered number is 895 fish farms and a number of 233 fish nursery.

In 2005 in aquaculture sector where registered as working a number of 2781, 90 percent being represented by mans and this number represents 40 percent of the work force used in fish farming activity in Romania.

Also as statistics from registered data at National Agency of Fishing and Aquaculture indicates that production of fish farms from aquaculture is 7248 tones, representing 54.55 percent of the total fish production in Romania. The statistics are also indicating that fish production until year 2005 was decreasing from 8056 tones production in 2004 and 7284 tones production in 2003. The statistics also indicates that the total production in 1980 was 50000 tones of fish from aquaculture, this information indicating that Romania could have space for increasing the production of fish. The production of fish from aquaculture that was registered in 2012 was up 10005 tones of fish and the value of fish production from aquaculture is at 18.1 millions euro.

Bee products from forestry units isn't a big production sector, in fact is almost inexistent, being capable to generate in 2015 an income of 9900 lei, when in 2008 have been able to generate an income of 168 thousand lei. The production of honey from forestry units is hard, the production being small it is necesarilly to be sold on a bigger price and not be appreciated on the market as it should be.

Other wood products is also an important generator of income for forestry units, being capable to generate an income of 5.3 millions lei in 2008, growing up to 7.2 millions lei in 2010 and starting a decrease from 2012 where the income registered was 3.2 millions lei and going down to 2.7 millions lei in 2015. In other wood products category we include small and ornamental trees, Christmas trees and osier.

From all sector of forestry related activities, only truffles and edible mushroom sector, other vegetable products and fish farming had the capability to grow and develop from 2008 to 2015 period, only fish farming being capable to exceed it's maximum potential in 2015.

At Romsilva it exists arranged a number of 41 fish farms, a number of 24 of them are in part with National Institute of Reseach and Development in Forestry „Marin Dracea” capable of a production of 600 tones in 2015 of fish for consumption and aproximatively 1 million trout for repopulating the mountain waters. The income generated by fish farms

owned by Romsilva is at 10.2 millions lei in 2015, representing 92.7 percent from the income generated by fish farming sector data revealed from National Institute of Statistics.

One of the main problems is that the quantity the market ask is bigger then what we are capable to offer for this moment, we where caught unprepared and the market is an open market, so for the final consumer another important aspect is the price his paying for the products, so a lot of companies want to take an advantage and buy from import at a lower price. The reported data by National Institute of Statistics are not accurately exact, because of the leak of reports necesarilly to be done by private companies that activate in forestry related activities domains, so the productions are even bigger. But because of the necessity of the market and the force of the price, some of those products moved up from being produced in forests to be produced in specialized farms, where they are capable to obtain a bigger production for less costs.

4. Sustainable Development

Even if Romsilva respects the laws in forestry administration and by it's forestry authorities implement programs that have the role to protect the forests and cleaning them out for a sustainable development of forest, has in implementation programs for reforestation of lands and degraded lands, the activity is including cleaning the attacked forests by diseases in order to protect the healthy forests, the activity on the field was always contested by non-governmental organization by presenting reports about some of the companies activity that they do.

Many reports made by jurnalists and non-guvermental organizations says that in Romania at this moment 3 hectare of forests are dissapearing in illegal activities. Nostrasilva, which is The Federal Organisation for Forest and Pastures Owners in Romania agrees this information, telling about 250-300 thousand hectare of forest that have been harvested in illegal activities over the years, but place this activity in the period 1991 to 2000, after Law Nr. 18 in 1991 take place and before Law Nr 1 from 2000 to come and reglement the refunding of forest lands by the forestry laws.

Protected areas, because of the natural value and low influence of people interventions, are one of the best exemple and model for natural ecological system. Protected areas are perceived from people as oasis of wild nature and needs to be protected for the wild species that are populating them. In fact, protected areas are support for life and helps develop the socio-economical factories.

Romania owns at this moment 29 protected areas, with a total surface of 1.67 millions hectare and Romsilva continues to manage 22 natural and national parks by their 22 structures of administration with legal personality.

WWF is an international non governmental organization that runs projects for protecting nature against human abusive activities that modifies the nature capacity to grow healthy. In Romania, WWF organisation runs programs about protecting mountain waters and protection for virgin forests.

Agent Green is another non-governmental organisation that runs campaigns to inform people about abuse activities of harvesting wood in Natural Parks and try to do their activity by petitions and inform companies about the wood they are buying for their activities.

5. Investing opportunities from external and national funds

SAPARD or Special Program for Preadherence in Agriculture and Rural Development it is a program created from the European Union in order to help countries achieve a level of efforts in order to adherence to the European Union. The program SAPARD was reglemented in 21 june 1999 by the Directive CE/1268/1999 and it was made to support countries in developing agriculture and rural development from Centre and East Europe in preadherence period.

The 3rd priority axe from the SAPARD program is about Rural Economy Development, Action 3.5 being focused on forestry. For the period 2003-2006 the contribution from UE and Romania Government is 40.5 millions Euro, the private contribution needed to be 38.5 millions Euro. For the project owners that where eligible for this program, 50 percent of the program was supported from SAPARD Program and 50 percent of the program had to be supported by the owner of the project. For the SAPARD Program only 75 percent of the funds available where been used in implemented projects.

The activities eligible for this program are:

- afforestation, with a maximum eligible value for the program is 500000 euro and the minimum eligible value is 10000 euro.
- forest nursery, the maximum value that is eligible is 500000 euro and the minimum eligible value is 10000 euro
- investements for improvement in primary wood production and for marketing of forestry products, with a maximum eligible value of 500000 euro and a minim value for the program of 10000 euro

- forest roads, the maximum value is 1 million euro, the minimum value eligible is 50000 euro

- forest management, the maximum eligible value is 800000 euro, exceptions made for companies that has as activity harvesting wood where the maximum value is 500000 euro, the minimum amount of the program is 6000 euro.

This program can be applied by:

- individual persons, owners of lands with destination of forest or agriculture

- companies, owners of lands with destination of forest or agriculture, part of the religion units, schools or associative forms and property associations in this domain

- local councils or cities and their associations

- economic agents that have activity in forestry domain

In campaign of European Funds given in the period 2007-2013 the only program about forestry is about First afforestation of agriculture lands, the motivation for this program is that the surface of our country covered with forest is smaller then the European average and the average surface for every individual is a little bit lower, 0.28 hectare in Romania when the European average is 0.32. The purpose of this program was to transfer from the agriculture to the forest fund a surface of 49348 hectare and to be covered with wood. The objective of this program was to enhance land surfaces with forests with vital role in protection of water, soil, forest for protection against natural factors, diseases, threads and to ensure recreational factories.

The Operational Program of Fishing which was implemented in 2007-2013 period was to help and develop fish farms from forestry to the sea.

For the period 2014-2020 of implementing operational programs with money from European Union in order to develop Romania as country, the fishing and aquaculture was again a separate operational program that wants to come and help fishing activating companies, from production to marketing and sales, develop and improve the way they manage to do this business. In the priority number 2 of European Union is specified Stimulating a sustainable aquaculture activity, efficient in order to use resources, innovative, competitive and based on the know how.

6. SWOT analyze of the forests

Strong Points	Weak Points
-Romania has more important forests marked as protected areas, because of	-the laws and legislation in forestry is in continuous changes and can leave gates

<p>the importance in diversity of wild life -around 27 percent of the total surface of the country is part of the forestry fund -the related activities in forestry are very diversified, offering for the future a good prospective in initiating programs that can develop this sector -because of the National and Natural Parks that Romania has the turism into this zones is more intense and people from other countries comes to visit our country -Romsilva is able to work in order to protect the forests against diseases and fires and to help forests regenerate</p>	<p>for companies to inappropriate activities that can damage the health and sustainability of forests -the forests are very fragmented when in comes to individual owners and this is very hard to monitorize their activity -because of the market, some of the products that the forest offers from related activities are starting to be made in farms, the price is going down because of the market -some of the forests have been cut down completely</p>
<p>Opportunities</p>	<p>Threats</p>
<p>-Romania can develop programs to help and monitorize the activity of companies that are harvesting wood and control them from the products that are selling, from the forest to the factories -can be developed programs for the individual owners to create related activities from their forest instead of harvesting the wood -the laws can be changes in order for companies that are harvesting wood to plant new trees, in order to develop forest nursery, so it will help local communities in creating new jobs -to be able to label products that are coming from local</p>	<p>-the tourist if are not correctly informed can leave damage to the forests from National and Natural Parks and affect the wild life -on the data report made by Romsilva and Nostrasilva, the surface covered by forest is maintaining, because of the natural growth and regeneration by the forest in some areas, but what if the forest is to affected by activities and the regeneration is affected also? -forestry activites are important for the economy, but what damage can leave if the activity will extend further more into the protected areas?</p>

7. Conclusion

The conclusion taken after presenting this report is that Romania have the opportunity to increase the income from forestry related activities, the potential in this sector being bigger then what is our country capable of production, indicating in aquaculture production that the production was 5 times bigger in the comunist period then what we are capable of production today. Investments are also necesarilly into marketing and branding the products from the forests in order for the consumer to differentiate on the

market the product that comes from the forest and the one that is coming from an intensive farm.

Forestry related activities are directly connected to the forest, so the government need to work at legislation in forestry activities and companies to have a plan into their activity to develop a sustainable sector for the future being capable to increase the income.

The 2014-2020 operational programs made with the agreement and support of the European Union is made to support fish farms as aquaculture production for creating and expanding fish farms, also with the role of consumer protection, environment protection and ecological production if possible, to continue the good evolution and the progress made from the operational program implemented in 2007-2013 period.

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