**FORESTRY ACTIVITIES, ZERO WASTE, AND CIRCULAR ECONOMY IN TURKEY**

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Forestry activities organized and put in practice by General Directorate of Forestry in Turkey, the organization constituting the backbone of the forestry sector since 1839, have been focused on “the narrow sense of forestry”, consisting of technical, managerial, economic and biological activities, by creating forest areas by sowing and planting, protecting the borders of forests, expanding the forest areas horizontally and vertically, and benefiting from the timber and non-timber forest products along with animal products, and services.

In the production chain to create new forest areas by sowing and planting, the limited use of the artificial fertilizers, from the production of saplings in plantations to the cultivation of fully grown trees, lowers the amount of non biodegradable waste produced along the line significantly, and makes the whole process “organic” from seed to harvest.

Economy as a discipline born out of people’s need to balance between the limited resources and unlimited wants, focusing on production, consumption, and fair sharing, fails to meet its goals starting from the distribution of wealth. As a result, environment, natural resources and forest ecosystems are suffering from the needs growing, and limited income and resources that are getting scarce.

In the key sectors forming national economies, which are agriculture, forestry, industry and services, it is necessary to prioritize waste management focusing on creating extra income or cheap raw materials for production by physically and biologically recycling of the natural waste, retroactively marketing the artificial waste produced. Therefore, it is both possible to minimize the destruction of the environment and lower the productions costs by the use of recycled raw materials.

Consequently, it might only be possible to reach the end goals of sustainable development programs of the world nations and countries, defined in the Earth Summit of United Nations (UN) in Rio de Janerio, Brazil in 1992 and also in the 2030 Sustainable Development Agenda in UN Summit in 2015, if a sustainable forestry management idea could be implemented by combining the circular economy, consisting of green economy, bioeconomy, waste management, retroactive marketing notions, with economic, ecological, and social platforms.

The socio-economic/cultural problems faced by seven million villagers, called forest villagers, living in over twenty thousand villages inside or near the forest areas in Turkey might be an important and limiting factor for the implementation of circular economy in forestry. Forest villagers, benefiting indirectly from the ecological functions and directly from the economical functions of Turkey’s forests, have $2492 per capita income, which is 23% of the national average. On the other hand, this is only 14% of the yearly income of forest villagers who have other incomes. Therefore, it will be possible to implement the needs of sustainable forestry in Turkey by increasing the income of forest villagers, and consequently the percentage of the income directly coming from forest resources by meeting the requirements of circular economy.

Forestry sector, meeting the requirements of sustainable development centuries before other sectors did, had been using the principals of circular economy for a long time even before the notion itself came into existence with continuity in forestry which is the origin of the sustainable forestry management. Forestry in Turkey, implementing the continuity principle in the chain of management from national development plans to main forestry plans, from forest management plans to harvesting and marketing wood-based products, should inherit the management of non-timber forest products and services in five-year development plans, sector plans, and forestry management plans to understand and meet the requirements of circular economy strategies.

Forestry Sector in Turkey, in order to increase its total revenue and efficiently meet the requirements of circular economy, should minimize the negative impacts of the external factors like forest fires, floods, overflows, landslides, soil erosion, or poor forestry management and its applications. Thus, the sector should also focus on the non-timber plant-based products, animal products, non-timber service products, biological diversity, carbon storage, and medicinal products to increase the positive external impacts of forestry products. Consequently, Turkey would contribute to regional and global sustainable development by implementing appropriate organization scheme, legislations and policies.