RESERVES OF COST REDUCTION OF GOODS IN THE PRODUCTION OF ESSENTIAL OILS IN GEORGIA

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ABSTRACT

Transfer of planning according to the unified indicator – productivity of oil on one hectare of essential oil cultures plantation - in manufacturing essential oils, will increase the efficiency of production in agricultural, as well as in processing facilities and will promote their balanced development. This is especially important in production of such essential oil cultures’, as basil, geranium, lavender and others.

We think that in order to estimate the quality of the essential oil materials, we need a unified, common penetrating indicator. Such indicator may be performed by oil and accordingly, the composition of general components in raw material. Thus, transfer to realization of raw materials according to oil composition requires differentiation of state purchase prices on the raw materials, not only according to oil contained in raw materials, but also considering components in the oil.

Thus, the system of developing the organization of delivering raw materials at essential oil factories, should consider hour schedule implementation of importing raw materials, which will ensure optimal terms of harvesting essential oil cultures and maximum load of processing industry production volumes.

Keywords: Production of essential oils, Cost Reduction, Georgia
While satisfying the social needs in household products, the production of essential oils has a great role; however, its contemporary level can barely satisfy real requests. Thus, Georgia imports up to 30 types of essential oil products from abroad, when according to natural conditions, most of them may be produced in Georgia.

Manufacturing of essential oils from local raw materials in Georgia has developed since the 20th century. There was an Agro industrial Community “Saketerzetmetsvi”, which in 1989 combined 23 independent manufacturers, including – 9 farm-factories producing essential oils (in Telavi, Kvareli, Lagodekhi, Abasha, Babushera, Kindghi, Gali, Kolkhida, Korsha) and 4 specialized farms producing essential oils. Georgian essential oil producing farm-factories, with the volumes existed at this period could produce 752 tones of Rose, 35000 tones of Geranium, 34700 tones of Basil and 34800 tones of other types of raw materials’ essential oils in one season.

In the first decade of Georgian independence, farm-factories, producing essential oils stopped working. Some of them were left on the territories occupied by Russia, some general means of the factory were bought by foreign countries at a penny price, or our enterprises sold them to foreigners as scrap-metal. Therefore, since the Georgian Independence to 2010, production of essential oils and their realization suffered some kind of stagnation in Georgia.

In 2011, the company called “Sakartvelos Eterzetebi” (Georgian Essential Oils) was established in Georgia, which at present is busy growing several species of essential oil plants, as well as manufacturing and realization of them. Famous gardens of “Sakartvelos Eterzetebi” are located in Georgian regions like Zugdidi, Borjomi and Khashuri, also in Chakvi. Their common space counts 150 Ha. More than 70 persons are employed by the company.

The company “Sakartvelos Eterzetebi” will produce the first products this year. It will produce basil, eucalyptus, laurel, fennel oil, which will be exported in different European countries. In addition, special oil-producing plant is already under construction, which technological line was brought from Germany.

In natural climate conditions of Georgia, here is an important raw-material base, if essential oil cultures and culture of producing essential oils give the opportunity to get several, essential oils for farm industry, food industry and technical purposes.

Essential products are expensive products on world market because of their high prices, relying on Georgian natural materials base, the following cultures of essential oils are prospective to be grown: laurel, eucalyptus, geranium, basil, mint, lemon, grapefruit, orange, tangerine, rose and other representatives of Apiaceous family (like fennel).
It is important, that except from the farm industry, essential oils are also used in the most important branches of food industry aromating and conservation – like natural aromatizers and natural conservatives, which guarantees ecological cleanness of the product. Except this, natural aromatizators and natural conservatives received from essential oil cultures may be represented to the world market as independent products.

While producing essential oil cultures and essential oil products, we must distinguish organizational and technological structures of essential oils production, in particular issues of developing economical relationships between agricultural subdivisions and industrial enterprises processing essential oil raw materials.

Companies, producing essential oils, in which one subdivision grows materials and the second performs its processing, have one goal, bring the company high-quality and greater amount of essential oils.

However, sometimes in the conditions used in material production planning and its purchase system, material producing and processing enterprises interests are contrasting. In particular, while realization conditions of essential materials by weight, general quality indicator - oil capacity is ignored, because purchase is performed according the material quantity, that for sure is a significant loss for the field.

Purchasing materials without considering oil capacity encumbers implementing new breeds and hybrids of essential oil cultures. New breeds of essential oil cultures may come rushing down to existed ones with its productivity, but according to oil capacity and one-hectare essential oil culture plantation’s essential oil yield, may significantly exceed the existed. For example, from N7 plantation of Geranium high-oiled hybrid 12-15 tones of materials are produced on one hectare in average, and the essential oil productivity of this material do not exceed 16-20kg, while Pelargonium roseum productivity amounts 16-20 tones, and yield of the essential oil of this raw material do not exceed 16-20kg. In the conditions of realization of essential oil materials according to their weight, new, high capacity of oil and low-productivity essential oil cultures’ growing is not profitable for raw material producer bodies. In addition, it must be considered, that raw material producer bodies, economically most profitable period for harvesting is the period when the plantation gives the biggest harvest of the materials. For example, for geranium producer, the best period of submitting this culture is during October 15-November 15, therefore he tries to submit the raw materials to processing factory in this period. For the company, it is convenient to get geranium during September 15-October 15, when the oil composition in the material reaches maximum. Also, in the conditions of realization of essential oil materials according to the weight, bodies, submitting raw materials are trying to cut the plant on lower cut and to increase the submitted material mass. In these conditions, companies processing essential
oil raw materials, have to process materials including great quantities of admixtures and little amount of essential oils. This causes irrational use of production volumes of the companies, increased production expenses and increased net cost of ready products. This is exactly when there is a contradiction between bodies producing essential oil cultures and processing raw materials.

The shortcomings of above mentioned system of economical relations between companies producing and processing essential oils, obviously attracted the attention of essential oil specialists from some European countries. They began searching for the new ways and methods of increasing the quality of essential oil materials and accordingly, productivity of essential oils. As an experiment, the method was established of determining state purchase price of the essential oil materials according to the actual processed oil. Its essence was that for the certain period (3-5 years), considering the essential oil material types and local climate conditions of every farm, from one tone of conditional material, the normative of productivity of essential oil from raw material is confirmed, and the submitted weight of essential oil materials is determined by the actual productivity of the oil and according to basic norm determined by one tone of conditioned raw material oil productivity.

The advantage of this method is indicated by the fact, that from one tone of material and one Ha of essential oil cultures plantation, it gives the possibility of increased interest of agricultural workers by getting as much possible oil, as possible, compared with the submitted basis condition. As high the productivity of essential oils is, as much raw material submission is considered for the agricultural body.

The main shortcoming of the state purchase method of essential oil materials, according to the oil composition is that it does not give the opportunity to consider the quality of received oil together with its quantity. The issue of measuring the quantitative quality of essential oil materials may be solved by determining its role and destination in used field. As it is known, essential oils are main materials used in perfumes and cosmetic industry. 90% of total produced materials are used in this field. This field, from its part sets certain demands to the quality of essential oils. First of all, it is interested in such general components of essential oils, like Eugenol – in basil oil, Geranol and Citroneol – in geranium oil, Phenylethyl alcohol, Geranol and Citroneol – in rose oil and etc., on the composition specific weight of which, the quality of essential oils depends.

We think that in order to estimate the quality of the essential oil materials, as well as the essential oils, we need a unified, common penetrating indicator. Such indicator may be performed by oil and accordingly, the composition of general components in raw material. Thus, transfer to realization of raw materials according to oil composition requires differentiation of state
purchase prices on the raw materials, not only according to oil contained in raw materials, but also considering minor components in the oil.

In the conditions of state purchase price according to oil contained in essential oil raw materials and general components, we consider it expedient to keep determined sanctions, and while existence of pollution and essential oil admixtures in submitted raw materials, such sanctions should be increased.

In the post-soviet period, at agro industrial union “Saketerzetmrets’vi’s” farm-factories, only productivity of essential oil cultures raw materials was recorded, and therefore, objective indicators of received oil from plantation unit did not exist. In European countries, such as France, Spain, Italy, Bulgaria and others, as the general indicator of growing essential oil cultures and processing raw materials, consider productivity of the oil from the area unit. Therefore, in all their informational sources, there are three indicators distinguished: spaces of essential oil cultures plantations, whole production of oil and Ha productivity of the oil.

Using such analytical indicator in essential oil production, as Ha productivity of essential oils from essential oil cultures plantation, completely represent the efficiency level of used plot of land, facilitates establishment of new breeds of essential oil cultures, development of sown technologies, productivity and incensement of oil composition. In this indicator is concentrated all the sides of increasing production intensification of agricultural body.

Transfer of planning according to the unified indicator – productivity of oil on one Ha of essential oil cultures plantation, in manufacturing essential oils, will increase the efficiency of production as in agricultural, also in processing facilities and will promote their balanced development. This is especially important in production of such essential oil cultures’, as basil, geranium, lavender and others.

There are number of factors impacting the final product in essential oil producing process. One of the objective factors is a daily changing of oil composition of the essential oil plants. For example, if a rose contains 100% of essential oil for 6-7 a.m., at about 14-15 p.m. it contains only 50-60%. Connected to this, prices on rose flower in some European countries, including Bulgaria are differentiated according to their picking and submission time at processing factories. At 10 a.m. when rose is submitted at reception unit, the raw material has a high estimation, at 11 a.m. the price is reduced by 15%, at 12 p.m. by 25%, and after 12 p.m. picked and submitted rose flower is estimated only with 50% of its price. We think that on Bulgarian example is notable and considerable for Georgian companies producing essential oils. Thus, the system of developing the organization of delivering raw materials at essential oil factories, should consider hour schedule implementation of importing raw materials, which will ensure
optimal terms of harvesting essential oil cultures and maximum load of processing industry production volumes. Discontinuation between daily demands of raw materials and used transport capacity in processing plants, leads to excessive quantities of vehicles, long-term waist of transportation, delayed processing of raw materials in the factories that increases the loss of oil in the raw materials. This means that when considering hour schedule of delivery of raw materials at the factory and the radius of supplying raw materials, transportation using issues must be determined as well. At the essential oil processing facilities should be formed dispatch service, which will ensure rhythmic income of the raw materials and its timely processing.

Therefore, promoting the development of economic relationships between the farms producing essential oil raw materials and processing industry facilities, together with increased essential oil production, will ensure the increase of their qualitative indicators.