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WHAT WILL THE MARIJUANA ECONOMY GIVE TO GEORGIA?

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114

EXPERT OPINION





საქართველოს სტრატეგიისა და საერთაშორისო ურთიერთობათა კვლევის ფონდი
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General Outline of the Government's Legislative Initiative

Just weeks after the July 30th, 2018 decision¹ of the Constitutional Court of Georgia on legalizing the usage of marijuana, in September 2018, the Government of Georgia presented the bill to the Parliament of Georgia on the production and export of this “agricultural product” for medical purposes. This initiative was preceded by an analytical letter² supporting the creation of marijuana economics in Georgia. It was written a year before and went practically unnoticed at the time, as nobody could imagine that an initiative from one of Georgia's marginal political parties would, within a year-and-a-half, come to be supported by the government.

Within the period of the development of this expert study, given the demands of the Georgian Orthodox Church and large segments of the Georgian population during the 2018 Presidential Election campaign, the Government of Georgia recalled its marijuana project from Parliament. Despite this, we deemed it necessary to continue our research, as there is still heightened public interest towards this issue.

According to the aforementioned government initiative, it will be possible to obtain 10 specific types of license connected to the production of cannabis in Georgia, which include:

1. License for planting, growing and cultivation for medical purposes;
2. License for planting, growing and cultivation of the cannabis plant for industrial purposes;
3. License for processing the cannabis plant for medical purposes;
4. License for processing the cannabis plant for industrial purposes;
5. License for the transportation of raw or processed cannabis plant and/or products derived from it;
6. License for the production of perfumes/cosmetics containing the cannabis plant;
7. License for the production of pharmaceutical products containing the cannabis plant;
8. License for the export of processed cannabis plant for medical purposes and/or pharmaceutical products containing the cannabis plant;
9. License for the export of processed cannabis plant for industrial purposes and/or perfumes/cosmetics containing the cannabis plant;

10. License for the imports of seeds and/or seedlings of the cannabis plant for industrial and/or medical purposes.³

It must be pointed out that it will not be enough to buy only one license to export cannabis. It is necessary to buy licenses for the import and cultivation of raw material, as well as for the transportation and export of the end product. Given the complexity of producing cannabis-containing goods for pharmaceutical purposes and for perfumes/cosmetics, as it is associated with several years of experimentation and difficult licensing/patenting procedures, the demand at first should be expected only for the remaining eight types of license.

Article 1 of the bill clearly outlines the prices of each license – GEL 25,000; however, Point 6 of Article 14 says that “a license can be given through an auction, according to the rules stipulated by Chapter IV of the Law of Georgia on Licenses and Permits. Further, the license can be given directly, in case of approval from the Government of Georgia.” As such, it is unclear whether the price of the license will be GEL 25,000, or if this is just the initial bidding price for the auction.

Nowhere is it indicated for what area or volume of cannabis the license can be given or what amount of marijuana in tons the government is planning to allow to be produced in the country. Despite this, Sub-Point 5 of Article 14 reads that “the license must specify the permitted quantity for planting, growing, cultivation and production, taking into account the domestic quota.” Such ambiguity can be considered a negative aspect of the proposed bill, making it more difficult to make precise calculations. Consequently, it is unclear based on what calculations the Minister of Finance of Georgia stated he hopes that Georgia will get GEL 1 billion income (from cannabis production) annually.⁴

The only clarification can be found in Article 14 of the bill, which says that only legal entities will be able to obtain licenses for the production of cannabis, i.e. companies with the legal configuration of Limited Companies or Joint Stock Companies. In addition, it is prohibited to turn such licenses over to other persons. As such, it will be impossible to avoid paying certain taxes; however, given the export-oriented nature of the product in question, it cannot be subject to excise tax (especially given the fact that such a tax for marijuana is not yet envisioned) or Value Added Tax (which is returned to the exporting company even if it pays it).

Regulation/Monitoring

The Ministry of Environmental Protection and Agriculture must create a specific agency, the aim of which will be the regulation and control of the legal turnover of the cannabis plant. The budget of this organization, according to the bill, will be set at GEL 500,000.

According to the initiative, planting, growing and cultivation of the cannabis plant will only be possible in closed buildings, presumably greenhouses; however, processed marijuana has to be kept in a building with strict security measures, with necessary light/sound alarms, round-the-clock security personnel and CCTV monitoring on both the internal and external perimeter. Unfortunately, the bill does not specify the type of the building or its maximum or minimum dimensions.

World Market

Presumably, the world market for marijuana is free and is based on the supply-demand concept. For example, according to the Washington State Liquor and Cannabis Board, the growth in the number of producers between 2014 and 2016 significantly reduced the prices for marijuana sales, which is explained precisely through the supply-demand factor by the experts.⁵ Information regarding the areas and volumes of the production of marijuana is only available for several countries. It should also be noted that establishing oneself on this market is likely not going to be an easy task.

According to Arcview Market Research and BDSAnalytics, the legal market for marijuana in 2017 amounted to USD 9.5 billion, with forecasts of growth to USD 32 billion by 2022 and USD 57 billion by 2027. Hence, the number of countries legally producing cannabis has grown significantly.⁶

It can be stated that the world has declared war on illegal business and there is a targeted attack taking place against illegal marijuana. Nevertheless, in September 2018, Canada was the first country in the G20 to make marijuana fully legal in terms of cultivation, distribution and realization⁷.

According to the statistical data from the 2016 UN study, the UK is number one in terms of the legal production and export of marijuana. More specifically, it produced 95 tons, of which it exported 2.1 tons. The value of the exported goods amounted to about USD 21 million.⁸

Countries with a successful agricultural sector, such as Israel, Australia and Finland, are also involved in this field.⁹

Today, the maximum price of 1 gram of cannabis on the black market is USD 32.66 (Japan), whilst the minimum is USD 1.34 (Ecuador). On the legal market, the average price of 1 gram of Canadian cannabis is USD 10.3 whilst the US cannabis varies from USD 7.5 to 18 by state (including taxes).¹⁰

Cultivation of Marijuana

Before moving on to the taxation regime, it is necessary to take a look at cultivation factor. First, it must be pointed out that marijuana is a one-year agricultural product and, compared to other species, given the world market price, it is significantly more profitable. For example, the minimum profit of marijuana on 1 hectare of open soil in China is USD 1,500.¹¹

In order to implement the cannabis project proposed by the Government of Georgia, the country will need agricultural technologies and other relevant specialists that it does not currently have. Hiring people from abroad will not contribute in terms of inclusive economic growth within Georgia.

Further, the technological processing must be maintained precisely so that the CBD (the substance that is used medicinally and does not cause a high) concentration is not altered. Hence, new seedlings will be needed, which also requires additional expenditure.

Expected Incomes

According to US data, those employed in the legal marijuana business have, on average, double the salary as compared to the national average.¹² Hence, it is to be expected that this branch of economy will also create several thousand high-paying jobs in Georgia. Plantations of legal marijuana in the US are distributed over 16,000 hectares,¹³ employing from 165 thousand to 230 thousand people.¹⁴

Given the fact that export goods in Georgia are free from a number of taxes, it will be interesting to see what benefits it can have for the national budget on the one hand and for the employed and general economy on the other.¹⁵ More specifically, creating a greenhouse on one hectare of land (according to the legislative initiative, producing cannabis will only be permissible in a closed space) and dealing with all the security norms will take GEL 4 million on average; the volume of cannabis harvest on such an area, at the first stage, can be from 3 to 7 tons, while the average volume of end product after processing and drying will only be 0.8 tons on average.¹⁶

As for its price, in our calculations we used USD 10 per gram as an average price for cannabis, while the number of those employed on the plantation was 100. If we take the US experience as an example, where specialists in the cannabis field have double or even higher salaries than the national average, in Georgia, GEL 3,000 gross is over double the national average (GEL 1,103.5 in the second quarter of 2018)¹⁷, which leaves GEL 2,400 to be paid to each employee per month after deducting income tax.

As Table 1 shows, given the aforementioned conditions, the net profit of the company in the very first year could reach GEL 10.6267 million. Within a five-year cycle (taking into account that the license should be valid for five years), the net income of the company could exceed GEL 66 million. If we imagine that 10 such companies appear on the market, they will be able to make GEL 667 million in profit within five years.

Table 1. Expenditure and Potential Profits (in GEL) of Cannabis Producing and Exporting Company on One Hectare of Land

Year	Investment	Production	Profit (1 gram = \$10)	Employment (plantation specialists, security)	Wages Fund (100 People x GEL 3,000 gross x 12 months)	Net Profit
I	4,000,000	0.8 tons	21,000,000	100 People	3,600,000	10,626,700
II	0	0.8 tons	21,000,000	100 People	3,600,000	14,018,200
III	0	0.8 tons	21,000,000	100 People	3,600,000	14,018,200
IV	0	0.8 tons	21,000,000	100 People	3,600,000	14,018,200
V	0	0.8 tons	21,000,000	100 People	3,600,000	14,018,200
Sum	4,000,000	0.8 tons	105,000,000	100 People	18,000,000	66,699,500
10 Company Sum	40,000,000	40 tons	1,050,000,000	1,000 People	180,000,000	666,995,000

It is no less important to calculate that the profits made by companies occupied with producing export marijuana is what Georgia’s national budget will receive, serving the overall interests of the Georgian population much more than it does the profits of the company. More specifically, the current tax legislation in Georgia in such cases envisages the following taxes: income tax – 20% (calculated from the employee’s salary);¹⁸ property tax (resident factory/organization pays this on the actives on its balance, registered as main assets, uninstalled devices, unfinished constructions as well as properties leased by it) of no more than 1%;¹⁹ dividends – 5%;²⁰ profit tax – 15%²¹ and licensing fee – GEL 200,000 (according to our calculations, at the first stage the companies will need only eight out of ten licenses).

As Table 2 shows, budget revenues are significantly lower than the company profits. More specifically, from each company, the Government can get GEL 3.5 million per hectare within the first year, while over the following four years, it can get GEL 4.1 million annually. If the number of such companies stands at 10, in a five-year cycle, Georgia’s national budget will receive additional revenue of almost GEL 200 million.

Table 2. Expected Budgetary Revenues from One Hectare of Export Cannabis Production (GEL)

Year	License	Income Tax	Property Tax	Profit Tax	Dividend	Sum
I	200,000	720,000	40,000	1,974,000	559,300	3,493,300
II	0	720,000	40,000	2,604,000	737,800	4,101,800
III	0	720,000	40,000	2,604,000	737,800	4,101,800
IV	0	720,000	40,000	2,604,000	737,800	4,101,800
V	0	720,000	40,000	2,604,000	737,800	4,101,800
Sum	200,000	3,600,000	200,000	12,390,000	3,510,500	19,900,500
10 Company Sum	2,000,000	36,000,000	2,000,000	123,900,000	35,105,000	199,005,000

There is a probability that not all producers will be able to set up a plantation on one hectare and will want to do business on a smaller area. As Table 3 shows, when setting up plantations on half a hectare, the expenditure on licenses remains the same, while the harvest is half; the price of one gram of cannabis remains the same USD 10; the number of those employed reduces from 100 to 70, and the overall size of the wages fund also reduces. In this case, one company could earn up to GEL 4.65 million in profits per year, which is about GEL 30.65 million in a five-year cycle. If the number of such companies stands at 10, they will make GEL 306.5 million in profit in five years.

Table 3. Expenditure and Potential Profits (in GEL) of Cannabis Producing and Exporting Company on 0.5 Hectare of Land

Year	Investment	Production	Profit (1 gram = \$10)	Employment (plantation specialists, security)	Wage Fund (70 People x GEL 3,000 gross x 12 months)	Net Profit
I	2,000,000	0.4 tons	10,500,000	70 People	2,520,000	4,651,200
II	0	0.4 tons	10,500,000	70 People	2,520,000	6,499,520
III	0	0.4 tons	10,500,000	70 People	2,520,000	6,499,520
IV	0	0.4 tons	10,500,000	70 People	2,520,000	6,499,520
V	0	0.4 tons	10,500,000	70 People	2,520,000	6,499,520
Sum	2,000,000	2 tons	52,500,000	70 People	12,600,000	30,649,280
10 Company Sum	20,000,000	20 tons	525,000,000	700 People	126,000,000	306,492,800

Naturally, if companies set up plantations on 0.5 hectares, national budget revenues will also be reduced as compared to the previous example. More specifically, as Table 4 shows, in such a case the budget would receive GEL 1.83 million from each company, which adds up to GEL 9.8 million in a five-year cycle. If the number of such companies stands at 10, then the Government will attract a total of GEL 98 million in five years.

Table 4. Expected Budgetary Revenues from 0.5 Hectare of Export 44Cannabis Production (GEL)

Year	License	Income Tax	Property Tax	Profit Tax	Dividend	Sum
I	200,000	504,000	20,000	864,000	244,800	1,832,800
II	0	504,000	20,000	1,118,400	342,080	1,984,480
III	0	504,000	20,000	1,118,400	342,080	1,984,480
IV	0	504,000	20,000	1,118,400	342,080	1,984,480
V	0	504,000	20,000	1,118,400	342,080	1,984,480
Sum	200,000	2,520,000	100,000	5,337,600	1,613,120	9,770,720
10 Company Sum	2,000,000	25,200,000	1,000,000	53,376,000	16,131,200	97,707,200

If we assume that there are 10 companies on the market with one hectare of land and also 10 companies with 0.5 hectare (overall, 20 companies), then we can calculate that in the first year, the national budget will increase by GEL 53,261,000, while over the next four years it will receive GEL 60,862,800 annually. And this, according to the 2019 proposed national budget, will increase the budget (which is GEL 13.090 billion)²² by just 0.41%.

In total, 12 tons of products will be exported annually, with the cumulative value of USD 120 million. It should also be noted here that the export of 12 tons of marijuana products from Georgia is unlikely, given the fact that, as pointed out earlier, the largest exporter of marijuana in the world in 2016 was UK and it only exported 2.1 tons. Hence, our calculations are overly optimistic, and it has been shown that even in such an optimistic case, the implementation of the marijuana project will not have that positive a result for the national budget of Georgia.

Trade Balance and the Exchange Rate of GEL

According to our calculations, producing export-oriented medical marijuana will definitely have an effect on the Georgian economy. Exporting medical marijuana will positively influence the reduction of the external trade deficit of Georgia, which exceeded USD 5.2 billion in 2017.²³

According to the most optimistic calculations (10 companies on the market with 1 hectare of land and 10 companies with 0.5 hectare, overall, 20 companies) the external trade deficit will be reduced by USD 120 million annually, which is 2.3%.

Consequently, exports of medical marijuana will, to some extent, have a positive influence on the stability of Georgia's national currency, as it will stimulate the influx of foreign currency into the country. More specifically (in the case of 10 companies on the market with 1 hectare of land and 10 companies with 0.5 hectare, overall, 20 companies), USD 120 million entering Georgia as a result of medical marijuana exports will amount to 3.8% of the international reserves (about USD 3.153 billion²⁴ as of September 30th, 2018) of the National Bank of Georgia.

Possible Growth of Employment

According to the latest data from the second quarter of 2018, the overall number of employed in Georgia is 1,712,600. This means that 10 large (one hectare) and 10 small (0.5 hectare) marijuana producing companies will employ a total of 1,700 people, which is 0.1% of employment. If we take into account that the self-employed will not be able to produce marijuana, as it is a field needing licenses, it would be sensible to determine the share of people employed in these plantations in the overall number of those hired in the economy (878,300), which would be 0.19%.

New jobs for 1,700 people can also reduce the unemployment rate. Specifically, if we take into account that there are 1,948,800 people in the labor force and the unemployment rate is 12.1% (or 236,200 people), employment in marijuana plantations will reduce the unemployment rate by 0.1 percentage points to 12%.²⁵

The Challenges

The main challenge for producing medical marijuana is where the Georgian products will be sold. The UK example makes it clear that the export market is quite limited for such goods at this stage. More specifically, the UK supplies about half of the overall legal exports of marijuana products in the world, which is a total of 2.1 tons.

Of course, there is also the US experience, which produces millions of tons of marijuana per year; however, it is designated for domestic consumption, not export or medical purposes (even that is still mostly used by US companies). Unfortunately, neither the Georgian pharmaceutical nor the perfume sector are on a level to be able to process cannabis locally and export ready-made products. And economic growth attained from the exports of agricultural raw products, as we know, is called the *coat-tail growth*²⁶, which fosters economic backwardness.²⁷ Correct growth for our country will be practically impossible without the formation of a knowledge-based economy and the industrialization of the national economy.²⁸

If we assume that, after export, at the second stage, it will also be possible to sell marijuana on the local market, it is possible to attain even higher gains, and such manipulation of numbers could be cause for such an initiative.

The Dangers

Marijuana economics, apart from offering certain positive results, is also connected with risks.

First, the potential capacities the modern Georgian government has for ensuring order in the field of marijuana production and export must be assessed. The presentation of the issue in such form stems from the fact that, according to the authors of the bill, selling marijuana within the country under any pretext is punishable by criminal law.

It is noteworthy that there were a number of large protests in Tbilisi of late, with participants demanding liberalization of the drug policy, aimed at achieving the de-criminalization of the use of drugs and also of their possession for personal use in small quantities.²⁹ It is a fact that the proponents of the legalization of the use of marijuana were successful,

given that on July 30th, 2018, the Constitutional Court of Georgia deemed the sanctions envisaged by the Administrative Code for the personal use of marijuana to be unconstitutional, which made the usage of marijuana legal in Georgia. This move was what preceded the Government of Georgia's preparation and initiation of the bill on growing and producing marijuana.³⁰

In such a situation, it is hard to believe that the Government of Georgia will be able to institute full control over the sale of marijuana, as it is necessary to be able to buy this product in order to freely use it for personal consumption. As the consumption in Georgia is decriminalized, it is clear that Georgian law-enforcement structures cannot exert satisfactory control over the drug market.

Despite the fact that full adherence to the technological norms of producing medical marijuana envisages the maximum reduction of the component of a high, it is less likely that, at the current level of development, Georgia will be able to uphold these technological standards fully.

Even when creating marijuana plantations in Georgia with the sole purpose of export, the potential for the supply of additional drugs to the black market will increase, which the law-enforcement structures cannot effectively control at this stage.

Conclusion

Based on the international experience to date, the production of export-oriented medical marijuana in Georgia will have certain positive effects on the economy of our country. More specifically, in a five-year cycle (as the respective license is designated for five years only), 10 companies operating on one hectare of land will see profits of GEL 667 million, while 10 companies operating on 0.5 hectare of land will get GEL 306 million in profits over five years. Hence, the overall profits of 20 potential companies over five years will be around GEL 973 million. Naturally, if there are more companies and more land is designated for this purpose, profits will increase accordingly. However, if we take the experience of the UK into account, which was the largest marijuana exporting country in 2016 at 2.1 tons, then the calculations we have made for Georgia are clearly overly optimistic.

In comparison with the relatively impressive expected profits, the potential revenues of the national budget from this field will be much more modest,

due to the preferential tax regime currently acting in Georgia with regard to producing and exporting agricultural goods. Increasing tax pressure on marijuana, on the other hand, will definitely reduce its competitiveness on the international market.

Staying within the confines of the same overly optimistic example, when we have 10 companies on the market with 1 hectare of land and 10 companies with 0.5 hectare (overall, 20 companies), we can calculate that in the first year, the state budget will increase by GEL 53,261,000, while over the next four years it will receive GEL 60,862,800 annually. And this, according to the 2019 national budget, will increase the budget (which is supposed to be GEL 13.090 billion) by just 0.41%.

It is also worth noting how Georgia's external trade deficit will reduce (it exceeded USD 5.2 billion in 2017). Given that in the case of the proposed example of marijuana production, about 12 tons of marijuana will be exported, its overall value will be USD 120,000,000. Hence, it will only be possible to reduce the external trade deficit by 2.3%.

Even though the exports of marijuana will have a positive influence on the stability of Georgia's national currency to an extent, there is still no significant change. More specifically, in the case of the presented hypothetical example, according to September 30th, 2018 data, the influx of foreign currency, with regard to the international reserve of the National Bank of Georgia, will be just 3.8% of the reserve.

Practically, employment will not see serious growth either. Namely, in the case of the proposed hypothetical example, overall 1,700 people can be employed, which is 0.1% of total employment and 0.19% of those hired (not self-employed). At the same time, this will reduce the unemployment rate by just 0.1%, bringing it to a total of 12%.

The economic growth achieved by exporting agricultural raw products is called *coat-tail growth* by economists and it is justly believed to foster economic backwardness. Correct growth for a country like Georgia will only be possible by forming a knowledge-based economy and the industrialization of the national economy.

It is well known that full adherence to the technological norms of medical marijuana production envisages the maximum reduction of the component of a high CBD; however, it is unlikely that at the current level of development, Georgia will be able to uphold these technological standards fully.

At this stage, the law enforcement structures, especially given that the Constitutional Court has already decriminalized the use of drugs in Georgia, will not be able to prohibit the supply of drugs to the black market. And marijuana plantations, even when created solely for export, will increase the potential supply of drugs to the black market.

Given the aforementioned, creating and developing marijuana economics in Georgia does not bring serious positive results for the state or its citizens (except for those occupied in the business), while it creates additional risk, especially given the level of development of the country.

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