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Urban Community Gardens in Moldovan Cities:
Moldova has consistently been named one of the poorest—if not *the* poorest—country in Europe. Located in Eastern Europe, it was once a communist republic of the Soviet Union (USSR); today, it is a parliamentary republic facing many challenges in its development. As of 2022, about 33.6% of nearly three million Moldovans live beneath the national poverty line ("Moldova"). About 2.48 million hectares are cultivated—roughly 75% of the country—("Moldova Country"), representing how the base of Moldova's economy is agriculture. However, despite ideal geographic and climatic conditions, this sector is struggling to remain productive. Challenges like the market environment and climate change have resulted in rural to urban migration—about 58% of Moldova's population lives in the cities and 42% in the countryside ("Moldova Demographics"). One problem many Moldovans face is the rising price of fresh produce. To improve Moldovan lives, local governments, non-government organizations (NGOs), and a variety of other actors should build community gardens in Moldova's cities, thereby producing many nutritional and social benefits.

The typical Moldovan family has 2.8 members, and the most common occupations are found in construction, agriculture, and service ("Republic of Moldova"). The average monthly wage is 17400 leu ("Moldova Average"), equal to about $1000 and comparatively lower than the rest of Europe. Though healthcare and education is generally accessible, cities lack opportunity, forcing many Moldovans to search for them abroad. Luckily, most Moldovan households are not starving—a study in 2024 indicated 88% of respondents were eating an adequate amount of food. However, 22% reported receiving assistance, and three in five households used food-coping strategies ("Republic of Moldova"), indicating that many Moldovans must choose the cheapest options to put food on the table.

An individual's specific quality of life depends on many factors, like location and age. Since opportunity ceases in the countryside every year, Moldova's rural population is the most impoverished. The agriculture sector employs the most rural Moldovans, primarily through small-scale farms. In 2024, about 98% of Moldova's farmers were small-scale, with average farm sizes of 0.85-10 hectares ("Moldova"). Rural communities face worrying underdevelopment. For example, locals deemed 44% of drinking water wells polluted ("Drough Portal - Moldova"), often from fertilizer runoff. Moldovan roads are notoriously lacking in quality, with 53% in 2026 being designated as "poor" (Gridina). Not only can they be dangerous, but it drives up costs for transporting food. Rural children also have a lower quality of education, and many students must decide between schooling or supporting their families. Rural Moldovans usually get food from backyard farms or local markets. An expected diet includes bread, cereals, vegetables, and meat, normally prepared as soups or roasted dishes (Sturza and Ghendov-Moşanu). In general, while the rural population's living standards are not in absolute crisis, much work could be done.

Urban Moldovans are not living in luxury either, though their conditions are better than the rural population's. Large families and pensioners are the poorest urban demographic. They struggle to find affordable space, particularly in the capital Chişinău, where apartments may lack hot running water or proper sewage. Moldova's labor market values higher education or vocational training, but the national

curriculum is outdated, thereby leaving the younger population vulnerable. As a result, their income is low or non-existent, with 26% of young people being neither in employment or education and training in 2025 ("Young NEET"). City-dwellers also complain about heavy pollution, underdeveloped public transportation, and unmaintained green spaces ("What is the Quality"). The urban population has access to local markets where they can buy fresh produce, but street food is a popular and cheaper option. The most common goods include homemade pastries, Western snacks, and alcoholic beverages, most of which are higher in sugar and fats. (Albuquerque et al.). Should the urban population continue to grow, the average quality of life may worsen.

Before even searching for solutions, it is necessary to identify the cause of the problem. In Moldova's case, the cause traces back to the struggling agricultural sector. Agriculture is core to Moldovan society, connecting the rural to the urban, employing 27% of the labor force, and accounting for 12% of Moldova's GDP ("Moldova - Market"). Unfortunately, the sector is very vulnerable to changes in the environment. For instance, about 90% of crops are rainfed, but increased droughts from climate change can wreak havoc on crop yields. Small farmers struggle to access expensive, valuable technology, and Soviet-era irrigation is degraded and costly. At the moment, farmers and the Moldovan government are trying to fix irrigation systems and implement new strategies to save crop yields, indicating steps taken toward sustainability; however, if these attempts fail, the World Bank estimates that 10-30% of crop yields could be reduced by 2050 ("Climate-Smart Agriculture"). Additionally, farmers struggle to grow value-added crops. Only a few farmers can afford the expensive technology that allows wine grapes, berries, and vegetables to survive. All of these challenges result in a brain drain, characterized by younger, intelligent Moldovans moving to the cities; there, they struggle with low income and a lack of opportunities, while remaining rural residents are left to poverty and loneliness.

A failing agricultural sector can also worsen Moldovan health. The steep price for fresh produce makes families turn to processed foods, which are high in salt and fats. A 2021 study found that about 50% of the adult population was overweight, and over 80% of registered deaths were due to non-communicable diseases. Moldovans had deficiencies in iron, iodine, and potassium, which can be improved through bio-fortificated soil and a higher consumption of vegetables (Sturza and Ghendov-Moşanu). While Moldova is not facing a malnutrition or hunger crisis, the health of its citizens show much room for improvement.

Many actions need to be taken to save Moldova's agricultural sector. The government must continue its current projects to fix the country's irrigation while also creating policies to mitigate pollution and climate change's effects. Farmers must have accessibility to technology that protects crops, and the government should offer resources to foster education on sustainability and adaptation. However, should improvements become stagnant or fail, the growing urban population must have an alternate way to get fresh produce, a method that lessens reliance on the rural. The answer is simple at its core: Moldovan cities should build urban community gardens.

European post-socialist countries have a strong basis for urban community gardens (UCGs), one example being Romanian *mahalas*—districts intertwined with gardens, orchards, and vineyards that surrounded Bucharest. *Mahalas* were replaced by collective housing following the Second World War, but informal gardening survived despite the urbanization initiatives of the Eastern Bloc (Axinte et al.). The practice faded after the USSR's collapse, but with sustainability becoming so central to development, countries like Hungary, Bulgaria, and Poland turned to UCGs. Moldova has not followed in their neighbors' footsteps, but given the similar historical circumstances within the region, UCGs can become a reality

there. Moldova itself was once Bessarabia, a region of Romania. Up until the 2000s, many Moldovans saw themselves as Romanians and believed joining the two countries would bring economic benefits (Haynes). This view is no longer popular, but it forms a historical connection between the two countries and hints that what works in Romania can potentially work in Moldova. Luckily, Romania has a thriving community garden culture; an initiative organized by NGOs, schools, and Kaufland established twenty-one gardens around the country between 2018 to 2020 (Otman), showing that with thorough organization and support, UCGs may be feasible.

According to the United Nations Development Programme (UNDP), it is estimated that Chişinău alone will hold 50% of the urban population by 2030 ("Closed Moldova"); thus, for this proposal's purpose, all recommendations will focus on Chişinău. Chişinău is working to become a green city, seen through a 2018-2023 initiative that was centered on clean energy. A new project based on UCGs can fight a myriad of problems, the first being food insecurity. Farmers are struggling to grow vegetables, resulting in higher prices and an influx of unhealthy food flooding the markets. Potential UCGs in Chişinău can thus place emphasis on growing vegetables and berries. A greater availability of produce like greens, onions, blackberries, and raspberries can decrease the amount of sugars and fats in the Moldovan diet, thereby lowering the prevalence of deaths by non-communicable diseases.

In addition to hunger, UCGs also have the potential to assuage Moldova's ongoing crisis of social incohesion. A study conducted by the UNDP asked residents of Chişinău about their views on responsibility and decision-making, and it concluded that many residents put responsibility for their living situation on the government rather than themselves or the community; furthermore, only 5% of the 1000 people surveyed were preoccupied by societal needs ("Inequalities in Rural"). The data illustrates a society in which people fend for themselves and their families, not the community. This problem plagued Western Europe too, so much so that UCGs were *not* primarily established for food security, but for their social benefits. Studies show that UCGs can create bonds between the community by allowing gardeners to cooperate in a safe, peaceful environment. Gardens across Europe have been aimed towards disadvantaged groups like ethnic minorities, the unemployed, or recovering addicts, and many have successfully enriched the lives of their gardeners. A 2023 study on gardens in post-socialist Europe noted that finding willing people was never the hardest task (Istenič et al.)—to thrive, they needed resources and a strong organizational team.

It is difficult for UCGs to survive without proper organization and financial support. In Moldova, UCGs will first require the municipal government's approval to even be built, and that body will likely be involved in the process. Once approved, communities can host one or two events to raise money and increase interest in a garden, with the government and UNDP offering further support. When adequate funding is acquired, the many NGOs present in Moldova can start to work together on implementing this solution. One NGO is EcoVisio, a grassroots organization that creates initiatives supporting communities and climate action. EcoVisio's crowning achievement is Rîşcova, a green village that teaches its residents how to farm sustainably and conserve natural resources. Thus, EcoVisio can organize and teach urban residents about UCGs. Additionally, gardeners can work with Katalyst Kitchens, a Moldovan organization that calls itself the country's first food business incubator. Katalyst Kitchens, alongside providing food packages and entrepreneurial assistance, buys fresh produce and allows anyone to preserve it for free (Gorbach). The preserves may either be eaten by families during the off-season or sold, which can alleviate food insecurity, increase independence from the government and farmers, and encourage entrepreneurship.

Before a garden is built, a small leadership team of researchers, NGO members, and community representatives should be formed. Together, they will communicate with the government, locals, and companies to gather resources, create partnerships, and garner support. This would be followed by careful planning of the garden's specific design. The team may find locations with adequate sunlight, design rainwater storage barrels, create waste management systems, and even work to supplement soil with nutrients. Devised correctly, UCGs have the additional benefits of helping the environment by reducing Chişinău's urban heat island effect, lowering emissions from transporting food, supporting biodiversity, and lessening contaminated water and soil.

As with all initiatives, UCGs will not come without some obstacles. Fortunately, total opposition to gardening is not one of them. A 2022 study noted that 92% of respondents believe it is possible to grow fruits and vegetables in Chişinău, while 64% already garden informally and 10% would love to garden but lack the necessary space. Space is the most notable problem that could hinder this solution—the study found that 80% of respondents lived in blocs or flats, decreasing the amount of land available. Private land is also very expensive, and a recent increase in construction further reduces space and raises the potential for contaminated soil ("Chisinau Provides"). To lower costs, gardens could be built in the courtyards common in Soviet-era blocks or on rooftops, but not without proper testing for safe soil and structural support first.

Additionally, Moldova is split into three agro-ecological zones (AEZs): the Northern AEZ, the Central AEZ, and the Southern AEZ. Each zone has a unique environment that is more suitable for certain crops than others, meaning a garden's produce will depend on location. Unfortunately, some crops would be more expensive to plant in the Central and Southern AEZs, as some are annual crops or simply won't thrive in that region. If careful consideration is made on which fruits and vegetables are suited for each AEZ, the garden is more likely to succeed.

It should be noted that many of Chişinău's residents own plots of land called *dachas*. These Soviet-era plots of just 600 m^2 are often used for informal agriculture outside of the city. However, there is no recent, accurate estimate of how many people own and use them for farming. One United Nations study from 2015 put the number of hectares used for *dachas* at three-thousand, but also noted that these plots lacked proper waste collection and have not been tested for environmental safety (United Nations Economic Commission for Europe). Thus, the facts suggest that *dachas* are not widespread enough to divert significant interest away from UCGs, and UCGs would likely be the more regulated and sustainable option. Another possible road-block is post-socialist countries' aversion to collective work, including urban gardening. Some people believed the wildness of informal gardens could chase away investors, and others wanted no part in a remnant of communism (Axinte et al.). A cultural prejudice against communal work may still be alive in Moldova, seen through the heavy emphasis on individual actions in the UNDP study and the lack of UCGs. Thus, transparency, communication, and a thorough understanding of the community's needs should be core to each garden's leadership team. For example, developers should know that the working-age population may lack the time to garden, but encourage participation nonetheless through their children or elderly relatives. Finally, it must be ensured that all produce ultimately benefits the community. Throughout the year, the leadership team should note successes and setbacks, adapting the garden to secure tighter bonds and healthier food on every table.

It is undeniable that an incredible amount of work must be done to save Moldovan farmers from climate change and poverty. However, providing an alternate food source for the growing urban population can alleviate some pressure on the rural farmers as they continue searching for their own solutions. Urban

community gardens are not meant to be the ultimate savior, but they will improve the nutrition, food intake, and general quality of life for urban Moldovan communities. These gardens may prove to be the places where urban residents improve not just themselves, but the community as a whole. By strengthening ties between each citizen, Moldova gains the power to solve not just food insecurity, but any other challenges that the country may face in the future.

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