

DERIVATION AND PRODUCTION OF UNIQUE PRETEIN SUPPLEMENT

Environmental and Social Management Plan

LTD Enable

**Tbilisi
2021**

General information about the project and its location

| Institutional and administrative | |
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| Country | Georgia |
| Name of project | Derivation and Production of Unique Protein Supplement |
| Description of activities provided by the project | <p>The project aims to derive a unique protein supplement from snail <i>Helix Aspersa</i> (Muller; Maxima) in the form of powder and drink. For project implementation purposes, a production space will be leased. The space will have all necessary communications for the installation and operation of high-tech equipment required in the production process. Brand name of the produce will be PRO MAJOR.</p> <p>According to a recipe created and patented by a nutritionist and food scientist, the technological cycle of production includes:</p> <ul style="list-style-type: none"> • Washing of the raw materials • Separation • Sterilization • Testing • Bottling • Packing • Labeling <p>Details of technologic process are not disclosed for the protection of know-how.</p> <p>At the initial stage, the company plans to purchase raw materials from local suppliers, while in future intends the production of its raw materials. The construction of a snail farm is not envisaged under the grant project. In the first year, purchase of about 1t of raw materials is intended, 3t - in the second year, and production of own raw materials will commence in the third year.</p> <p>Purchased raw materials will be transported by the special refrigerated container, while storage is envisaged in a two-chamber production refrigerator at a temperature of 5°C. Certain amount of raw material will be stored in the freezer. In case of an emergency power outage, power supply will be provided through electricity generators.</p> <p>Snail shells will be the production waste - about 700kg per year. Because the production waste is characterized with a high content of calcium and is in high demand from pharmaceutical companies, as well as from artisans/designers, the intention is to sell the shells. In that case, the production cycle will not generate any considerable waste.</p> <p>It is considered to employ about 5-7 people in the enterprise, who will undergo relevant on-the-job training and take tests to prove acquired skills.</p> <p>Work with machines (all machines are independent automatic and semi-</p> |

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| | automatic: washing, separation, sterilization, bottling, packaging, labeling machines) will be implemented in accordance with all security measures and under the control of the line manager. | | |
| Institutional organization (World Bank) | Task Team Leader: Ipeinva Uchenna Onugha | Safeguard Specialists: Darejan Kapanadze, environment Sopia Grigorieva, social | |
| Implementation organization (Georgia) | Implementer: GITA, Ministry of Economy and Sustainable Development of Georgia | Supervisor of works: N/A | Grant Recipient: LTD Enable |
| Description of Location | | | |
| Address and location of enterprise | Area to be leased for setting up the production space will be picked from the currently considered two options. Both are located in suburban Tbilisi, in the territory of Isani-Samgori and Gldani-Mukhiani districts, respectively. Since the period from ordering to delivering of the equipment is 2 months, to save the grant funds, the lease agreement will be made 20-30 days before the arrival of equipment. | | |
| Description of the physical and natural environment around the area | For production, the lease of at least 250 sq.m. building is considered, which will be located away from the residential blocks. The area will be equipped with surveillance cameras and will have a guard, who won't be armed. Both buildings currently under consideration have all the necessary communications (water, electricity, natural gas, sewerage). | | |
| The distance to the source of supply of raw materials, and their location | The raw material – a snail <i>Helix Aspersa</i> – will be purchased from a local supplier. Estimated distance from the source of material to the intended production unit - 320 km. | | |
| Legislation | | | |
| National and local legislation and permissions related to the project activities | <p>According to the World Bank's OP/BP 4.01 Environmental Assessment, the subject activity is classified as environmental Category B that requires development of an Environmental and Social Management Plan.</p> <p>According to the national legislation, the subject activity is not subject to environmental impact assessment and the issuance of a conclusion by the Ministry of Environmental Protection and Agriculture. Production does not require any special permits, however, during the implementation of the project, it is necessary to:</p> <ol style="list-style-type: none"> I. Implement the mitigation measures envisaged by the Part C of this document; II. Purchase the raw materials necessary for production from registered suppliers, whose activities comply with the regulations established for their activities; III. Adhere to Order №304/n (LHG №91, article 661) of the Minister of Labor, Health and Social Affairs of Georgia on the Approval of the Sanitary Rules for the Arrangement, Equipment and Operation of Enterprises in Food Industry. | | |

| Public consultation | |
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| When/where will the public consultation take/took place? | Present ESMP will be disclosed through the web-site of GITA - www.gita.gov.ge |

Mitigation measures for possible negative impact on the natural environment

| Activity | Risk | Mitigation measures |
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| Installation and operation of production machinery | <p>Malfunction of equipment, short-circuiting, and fire due to inadequate electric wiring and/or improper installation of electric equipment.</p> <p>Shutting down of machines due to emergency power outage to the detriment of the production process.</p> <p>Accumulation of toxic emissions by placing the generator in a closed (non-ventilated) place to the detriment of the health of the enterprise workers; explosion; fire.</p> <p>Spillage of fuel required for generator due to improper storage of it and pollution, fine caused by this.</p> <p>Use of refrigeration systems containing ozone layer depleting chlorofluorocarbons.</p> | <p>Installation of production machines in strict compliance with the instructions by a professional in this field.</p> <p>Use of a generator as an alternative power supply in the event of an emergency power outage.</p> <p>Placement of the generator in an open or well-ventilated area</p> <p>Storage of fuel in an isolated area, where spill restraints (small reservoirs that do not leak, concrete cover on the floor, etc.) will be provided in case of spillage of fuel.</p> <p>Use of modern refrigeration systems which are in compliance with European standards and don't contain ozone layer depleting substances.</p> |
| Purchase of raw materials | Illegal and unsustainable obtaining of living natural resources from nature | Purchase of the raw materials from registered supplier |
| Warehousing of raw materials on the territory of the enterprise | <p>Spoilage of organic raw materials due to improper storage conditions.</p> <p>Odor nuisance caused by spoilage of organic raw materials and spreading of infection</p> | <p>Provision of the relevant lighting, ventilation, and facing materials for the storage.</p> <p>Warehousing of raw materials in compliance with the established conditions.</p> <p>Provision of proper operation of refrigerators, and timely repair in case of damage.</p> |

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| | | Compliance with sanitary-hygienic requirements in the enterprise. |
| Generation of organic waste (shell) | Contamination of environment by incorrect disposal of organic waste | Drying and storage of the cleaned washed shell in special storage containers for further sale. |
| Generation of inorganic waste (residues from packaging and labeling materials, used personal protective equipment, etc.) | Environmental pollution due to incorrect warehousing at the facility and incorrect final disposal | Placement of garbage containers on the territory of the enterprise and systematic disposal of waste based on an agreement signed with the local cleaning service. |
| Employment of workforce | Occupational health and safety accidents and other damage to health caused by ignoring labor hygiene and safety rules | <p>Delivery of training to personnel deployed at the production unit, especially to those operating machinery.</p> <p>Working with the equipment under the constant control of the line manager.</p> <p>Equipping the workforce with special uniforms.</p> |
| Guarding the facility | Exceeding of power by the guard | <p>Equipping the territory with appropriate video cameras and alarm systems by the security service based on the relevant agreement.</p> <p>Supervision of the production area by the guard through the monitors and informing the special services in case of suspicion.</p> |