# Appendix 1:

# Characteristics of the Purchase Item

# In order to prepare a feasibility study of the project "Comprehensive Plan for the Restoration of Trout Stocks and the Development of Fish Farming in Lake Sevan"

It is planned to conduct a feasibility study of the "Comprehensive Plan for the Restoration of Trout Stocks and the Development of Fish Farming in Lake Sevan," based on which the Contractor shall submit a "Business Development Plan."

The main goal of the paper is "Restoring Trout Stocks in Lake Sevan and Solving the Problems of Sevan," optimizing the activities of related organizations, and drawing up a roadmap for the creation and development of a business model.

Studied units (hereinafter referred to as the "units")

1. Foundation "Restoration of Sevan Trout Stocks and Development of Fish Farming"
2. Sevan Aqua CJSC
3. Sevan Trout CJSC

The consistent implementation of the Project shall ensure both the restoration of Sevan trout stocks in accordance with the established indicators and the creation of scientific and institutional opportunities to ensure the development of fish farming in Armenia as a whole.

The Project shall consider cases of various legal statuses of organizations that ensure the implementation of the Project (commercial or non-commercial) but in any case, the presence of a scientific part (laboratory, experimental center, etc.) is mandatory.

The Project shall also consider cooperation between the public and private sectors with both environmental and commercial components.

**Environmental Component**

The aim of the project is to restore trout stocks in Lake Sevan and develop fish farming.

Requirements for the feasibility study of the project implementation for environmental purposes:

1. About the viable age, ideal quantity, and release terms of Sevan trout and summer trout juveniles being released into Lake Sevan in order to restore trout stocks,
2. Only production (mother) and replacement fish (according to the calculation) being released into Lake Sevan in order to obtain Sevan trout and summer trout juveniles are grown and preserved in the nets installed in Lake Sevan; their rearing for industrial purposes, as well as the cultivation of other fish species, is prohibited.

The environmental component shall include the production and economic calculation of Sevan trout and summer trout released into Lake Sevan:

* quantity, breeding term, mass, release term
* fish-rearing movement (the required number of eggs, larvae, juveniles, brood fishes, and replacement composition)
* calculation of feed requirements and feed coefficient (for keeping and cultivating larvae, juveniles, brood fishes, and replacement composition),
* calculation of the water surface and water supply,
* technical and economic calculation and cost calculation (all envisaged expenses for obtaining the required juveniles)

The project component shall include

* production and economic calculation of farmed and sold fish, juveniles
* type, quantity, term, and weight
* fish-rearing movement (the required number of eggs, larvae, juveniles, brood fishes, and replacement composition)
* calculation of feed requirements and feed coefficient (for keeping and cultivating larvae, juveniles, brood fishes, and replacement composition),
* calculation of the water surface and water supply,

**Business Component**

Provide information on significant issues related to economic, financial, technical, and legal issues, deadlines, and business development programs of divisions, as well as detailed information about risks.

The main purpose of the feasibility study is to identify the target version of the project and confirm its feasibility from a technical, economic, financial, environmental, institutional, and legal point of view. The documents shall be submitted in accordance with international standards.

The main scope of the feasibility study shall include answers to the following questions:

* What "need" or opportunity will the proposed project affect and in what quantity?
* What are the goals of the project? What is the project aimed at? How can these goals be expressed in the best way?
* What are the options to achieve these goals?
* Is each option feasible?
* What will be the capital costs for each option?
* What will be the fixed costs incurred in each option?
* What benefits will be received and in what quantity?
* Given the risks of each option, are there unacceptable risks in the context of goals?
* What are the social and environmental impacts of the project?
* What is the entire planned period for the project, including planning, construction, and launch time?
* Do the expected benefits from a financial and economic point of view cost more than the estimated amount of expenses?
* What is the best way to implement the project, taking into account all of the above issues?
* Is the project available in the context of the Medium-Term Cost Program (MTCP)? Can all current expenses be paid within the budget of the proposing body?
* Does the organization responsible for the implementation of the project have the required skills to ensure effective implementation? If not, how will these skills be ensured?

The participant may expand the following content, if applicable, in terms of proving the feasibility of the project.

**The Content of the Feasibility Study**

**Summary Sheet**

The summary sheet shall consist of the most important information about the project, the subject of the project, and the general scope of activity and include at least the following:

- Project name,

- Scope of the project,

- Project location,

- Description of the problems/opportunities that the project will solve/that the project is aimed at,

- Project objectives,

- Description of the area affected by the project and the results of the demand analysis,

- Description of the project scope and investment value,

- Project implementation schedule,

- Summary and results of financial and economic analysis,

- Presentation of implementation settings,

- Project sustainability,

- Conclusions on the feasibility of the project and further proposals.

1. **Existing contextual analysis** 
   1. Revision of the socioeconomic context
   2. Government policy and strategy/master program for the sector/subsector
   3. Roles and responsibilities in the sector/subsector
   4. Summarizing the results of previous studies
2. **Market assessment and demand analysis** 
   1. Analysis of needs and identification of target consumers
   2. Analysis of alternatives, including adaptation alternatives, if applicable
   3. Demand forecasting
3. **Technical Research and Evaluation of Project Costs** 
   1. Field surveys/studies
   2. Assessment of spatial planning tasks
   3. Preliminary technical design
   4. Input parameters for construction, maintenance, and operation
   5. Evaluation of capital and operating expenses during the project life
4. **Financial Analysis** 
   1. Methods and assumptions
   2. Financial analysis of cash flows
5. **Economic Analysis** 
   1. Methods and assumptions
   2. Cost-benefit analysis
   3. Cost-effectiveness analysis (if applicable)
   4. Assessment of impacts not covered by the economic evaluation
6. **Environmental and Social Impact** 
   1. Methods and assumptions
   2. Environmental impact
   3. Social influence
7. **Availability of Financing and Budget**
   1. Project financing
   2. Availability of budget/financing
8. **Implementation and Operational Reliability** 
   1. Capabilities of implemented and operational bodies
   2. Draft project implementation plan
   3. Assessment of project management mechanisms
9. **Risk and Sensitivity Analysis** 
   1. The main sources of risks and their possible impact
   2. Risk mitigation measures
   3. Risk management program
   4. Sensitivity analysis
10. **Conclusions on the Feasibility of the Project**

The participant is expected to conduct an in-depth analysis of the options in order to assess and compare various alternatives that are generally considered capable of meeting the existing and future needs of the project and to provide the best solution. Options shall be assessed according to various criteria, including, for example, technical, institutional, economic, environmental, and climate change aspects (depending on the vulnerability of the program).

The version analysis is performed in two stages, the first stage concerns the main policy options (i.e., the type of infrastructure and the location of the project) and the second stage concerns specific solutions at the process level. The first stage shall be based on a multivalued analysis (mainly qualitative) and the second one on a quantitative approach.

Tools for analyzing multi-criteria and dynamic generation costs (DGC) shall be used.

The main aspects of choosing the best option shall concern at least the following:

* Project scope,
* Technical aspects,
* Economic aspects,
* Environmental and social aspects.

The cost-benefit analysis shall give the values of economic indicators, such as the net present value and the internal rate of economic profitability of the investment project.

**THE CONTENT OF THE BUSINESS DEVELOPMENT PROGRAM**

**Summary Sheet**

1. Information about companies
   * General information (year of incorporation, organizational and legal form, location, contact details)
   * Information about the owners and top officials of the company
   * Main activities
   * Description of goods and services
   * Key current financial indicators
   * [SNW analysis](https://hy.wikipedia.org/w/index.php?title=SNW-%D5%BE%D5%A5%D6%80%D5%AC%D5%B8%D6%82%D5%AE%D5%B8%D6%82%D5%A9%D5%B5%D5%B8%D6%82%D5%B6&action=edit&redlink=1) of the company
2. Information about the planned project
   * The essence of the project
   * Project location
   * Social, economic, and demographic environment
   * List and description of goods/services
   * Main marketing advantages
   * The total cost of the project (the amount of capital costs and the necessary working capital)
   * The general need to attract debt financing
   * Key performance indicators of the project
   * The main risks of the project
   * Social, environmental, and economic consequences of the project
   * Offer to the investor/creditor (acceptable cost of the loan, distribution of shares, profit distribution)

[Marketing plan](https://hy.wikipedia.org/w/index.php?title=%D5%84%D5%A1%D6%80%D5%AF%D5%A5%D5%BF%D5%AB%D5%B6%D5%A3%D5%A1%D5%B5%D5%AB%D5%B6_%D5%BA%D5%AC%D5%A1%D5%B6&action=edit&redlink=1)

1. Business environment
   * The general environment of the sector
   * [SWOT analysis](https://hy.wikipedia.org/wiki/SWOT-%D5%BE%D5%A5%D6%80%D5%AC%D5%B8%D6%82%D5%AE%D5%B8%D6%82%D5%A9%D5%B5%D5%B8%D6%82%D5%B6) of the sector
2. Description of goods/services
   * [Value chain analysis](https://hy.wikipedia.org/w/index.php?title=Value_Added_Chain_Diagram&action=edit&redlink=1)
   * [Boston Consulting Group matrix](https://hy.wikipedia.org/w/index.php?title=%D4%B2%D4%BF%D4%B3_%D5%B4%D5%A1%D5%BF%D6%80%D5%AB%D6%81%D5%A1&action=edit&redlink=1) (product lifecycle and scale of production prices)
3. Analysis of sales markets
   * Assessment of the market volume and probable trends in its development
   * Assessment of market share and sales volume
   * [Market segmentation](https://hy.wikipedia.org/w/index.php?title=%D5%87%D5%B8%D6%82%D5%AF%D5%A1%D5%B5%D5%AB_%D5%BD%D5%A5%D5%A3%D5%B4%D5%A5%D5%B6%D5%BF%D5%BE%D5%B8%D6%80%D5%B8%D6%82%D5%B4&action=edit&redlink=1) and determination of the market position (niche) of the product
4. [Competition](https://hy.wikipedia.org/wiki/%D5%84%D6%80%D6%81%D5%A1%D5%AF%D6%81%D5%B8%D6%82%D5%A9%D5%B5%D5%B8%D6%82%D5%B6) and competitive advantages
   * Comparative characteristics of competing goods/services
   * Comparative characteristics of competing companies
   * Analysis of the competitive situation in the market
   * Justification of the main components of the marketing strategy (marketing mix)
   * [SWOT analysis](https://hy.wikipedia.org/wiki/SWOT-%D5%BE%D5%A5%D6%80%D5%AC%D5%B8%D6%82%D5%AE%D5%B8%D6%82%D5%A9%D5%B5%D5%B8%D6%82%D5%B6) of goods/services
5. Organization of foreign economic activity of companies
   * Organizational support of foreign economic relations
   * Economic support of foreign economic relations
   * Alternative ways to enter the foreign market
6. Marketing plan strategy
   * General marketing strategy
   * [Pricing](https://hy.wikipedia.org/w/index.php?title=%D4%B3%D5%B6%D5%A1%D5%A3%D5%B8%D5%B5%D5%A1%D6%81%D5%B8%D6%82%D5%B4&action=edit&redlink=1)
   * Tactics for selling goods/services
   * After-sales service and warranty policy
   * [Advertising](https://hy.wikipedia.org/wiki/%D4%B3%D5%B8%D5%BE%D5%A1%D5%A6%D5%A4) and promotion of the product on the market
7. Sales plan
   * Factor analysis of sales
   * Seasonal price trends
   * Seasonal sales volume trends
   * Discounted price changes
8. Marketing costs (justification)
   * Conditional fixed marketing costs
   * Conditional variable marketing costs

Organizational plan and [management](https://hy.wikipedia.org/wiki/%D5%84%D5%A5%D5%B6%D5%A5%D5%BB%D5%B4%D5%A5%D5%B6%D5%A9)

* Organizational and legal form of the company
* Personnel structure
* Organizational structure
* Key partners and affiliated companies
* Information about consultants involved in the implementation of the project, design, and contracting organizations
* Legal basis of the project organization
* Basic requirements for personnel
* Provision of recruitment, retraining, and adaptation of personnel
* [Justification of the payroll fund](https://hy.wikipedia.org/w/index.php?title=%D4%B1%D5%B7%D5%AD%D5%A1%D5%BF%D5%A1%D5%BE%D5%A1%D6%80%D5%B1%D5%AB_%D6%86%D5%B8%D5%B6%D5%A4&action=edit&redlink=1) (salary and piecework wage, bonus system, etc.)
* [Proceeds from the sales of goods/services](https://hy.wikipedia.org/wiki/%D4%B5%D5%AF%D5%A1%D5%B4%D5%B8%D6%82%D5%BF)
* Terms of sales of goods/services (payment upon purchase, prepayment, deferred payment)
* List of raw materials and components required for the final product
* Terms of payment for raw materials and components (payment upon purchase, prepayment, deferred payment)
* Formation of transport and storage [facilities](https://hy.wikipedia.org/wiki/%D4%BC%D5%B8%D5%A3%D5%AB%D5%BD%D5%BF%D5%AB%D5%AF%D5%A1)
* Logistics and time costs for raw materials and components
* Logistics and time costs associated with the final product
* Raw material stocks and frequency of purchases
* Stocks of finished products (% of monthly sales)
* [Tax system](https://hy.wikipedia.org/w/index.php?title=%D5%80%D5%A1%D6%80%D5%AF%D5%A1%D5%B5%D5%AB%D5%B6_%D5%B0%D5%A1%D5%B4%D5%A1%D5%AF%D5%A1%D6%80%D5%A3&action=edit&redlink=1) of the project
* Tax payments (monthly until the completion of the project)
* Fixed/administrative expenses (monthly until the completion of the project)

Investment plan

* Calendar plan for the development of all stages of the project before its implementation
* Calendar schedule of payments by project stages (payments for equipment, construction, etc.)
* Forms and terms of depreciation of all created capital assets of the project
* Reflection of depreciation deductions in the tax payments of the project

Production plan

* Brief description of the production
* Description of production cycles
* Strategy of providing raw materials and components
* Production regulations
* State and legal regulation
* Product improvement and final processing opportunities
* Calculation of direct cost separately for each product

Financial plan

* The need for financing (obtaining the amount of the loan (investment) and the financing schedule)
* [Loan](https://hy.wikipedia.org/wiki/%D5%93%D5%B8%D5%AD%D5%A1%D5%BC%D5%B8%D6%82%D5%A9%D5%B5%D5%B8%D6%82%D5%B6) redemption payments (repayment of the principal amount of the loan)
* Loan servicing payments (loan interest)
* Other cash proceeds
* Other payments from the project budget
* Profit and loss statement (monthly until the completion of the project)
* Cash flow statement (monthly until the completion of the project)
* Project balance statement (monthly until the completion of the project)
* [Break-even point](https://hy.wikipedia.org/w/index.php?title=%D4%B1%D5%B6%D5%BE%D5%B6%D5%A1%D5%BD%D5%A1%D5%A2%D5%A5%D6%80%D5%B8%D6%82%D5%A9%D5%B5%D5%A1%D5%B6_%D5%AF%D5%A5%D5%BF&action=edit&redlink=1) of the project
* Calculation of the need for initial current assets
* [Operational leverage](https://hy.wikipedia.org/w/index.php?title=%D5%95%D5%BA%D5%A5%D6%80%D5%A1%D6%81%D5%AB%D5%B8%D5%B6_%D5%AC%D5%AE%D5%A1%D5%AF&action=edit&redlink=1) (ratio of fixed costs to variable costs)
* [Financial leverage](https://hy.wikipedia.org/w/index.php?title=%D5%96%D5%AB%D5%B6%D5%A1%D5%B6%D5%BD%D5%A1%D5%AF%D5%A1%D5%B6_%D5%AC%D5%AE%D5%A1%D5%AF&action=edit&redlink=1) (ratio of equity to borrowed capital)

1. Financial indicators (monthly until the completion of the project)
   * [Current liquidity ratio](https://hy.wikipedia.org/w/index.php?title=%D4%B8%D5%B6%D5%A9%D5%A1%D6%81%D5%AB%D5%AF_%D5%AB%D6%80%D5%A1%D6%81%D5%BE%D5%A5%D5%AC%D5%AB%D5%B8%D6%82%D5%A9%D5%B5%D5%A1%D5%B6_%D5%A3%D5%B8%D6%80%D5%AE%D5%A1%D5%AF%D5%AB%D6%81&action=edit&redlink=1) (CR), %
   * [Quick assets ratio](https://hy.wikipedia.org/w/index.php?title=%D5%87%D5%BF%D5%A1%D5%BA_%D5%AB%D6%80%D5%A1%D6%81%D5%BE%D5%A5%D5%AC%D5%AB%D5%B8%D6%82%D5%A9%D5%B5%D5%A1%D5%B6_%D5%A3%D5%B8%D6%80%D5%AE%D5%A1%D5%AF%D5%AB%D6%81&action=edit&redlink=1) (QR), %
   * Net working capital (NWC)
   * Stock turnover ratio (ST)
   * Receivable turnover ratio (CP)
   * Working capital turnover ratio (NCT)
   * Fixed asset turnover ratio (FAT)
   * Total asset turnover ratio (TAT)
   * Total debt to total assets ratio (TD/TA), %
   * Total debt to equity ratio (TD/EQ), %
   * [Times interest earning ratio](https://hy.wikipedia.org/w/index.php?title=%D5%8F%D5%B8%D5%AF%D5%B8%D5%BD%D5%B6%D5%A5%D6%80%D5%AB_%D5%AE%D5%A1%D5%AE%D5%AF%D5%B4%D5%A1%D5%B6_%D5%A3%D5%B8%D6%80%D5%AE%D5%A1%D5%AF%D5%AB%D6%81&action=edit&redlink=1) (TIE)
   * Gross profit margin ratio (GPM), %
   * Operating profit margin ratio (OPM), %
   * Net profit margin ratio (NPM), %
   * Return on current assets (RCA), %
   * Return on fixed assets (RFA), %
   * [Return on investment](https://hy.wikipedia.org/w/index.php?title=%D5%86%D5%A5%D6%80%D5%A4%D6%80%D5%B8%D6%82%D5%B4%D5%B6%D5%A5%D6%80%D5%AB_%D5%B7%D5%A1%D5%B0%D5%B8%D6%82%D5%A9%D5%A1%D5%A2%D5%A5%D6%80%D5%B8%D6%82%D5%A9%D5%B5%D5%B8%D6%82%D5%B6&action=edit&redlink=1) (ROI), %
   * [Return on equity](https://hy.wikipedia.org/w/index.php?title=%D5%8D%D5%A5%D6%83%D5%A1%D5%AF%D5%A1%D5%B6_%D5%AF%D5%A1%D5%BA%D5%AB%D5%BF%D5%A1%D5%AC%D5%AB_%D5%B7%D5%A1%D5%B0%D5%B8%D6%82%D5%A9%D5%A1%D5%A2%D5%A5%D6%80%D5%B8%D6%82%D5%A9%D5%B5%D5%B8%D6%82%D5%B6&action=edit&redlink=1) (ROE), %
2. Assessment of the overall effectiveness of the project

Project risk assessment

1. [Sensitivity analysis](https://hy.wikipedia.org/w/index.php?title=%D4%B6%D5%A3%D5%A1%D5%B5%D5%B8%D6%82%D5%B6%D5%B8%D6%82%D5%A9%D5%B5%D5%A1%D5%B6_%D5%BE%D5%A5%D6%80%D5%AC%D5%B8%D6%82%D5%AE%D5%B8%D6%82%D5%A9%D5%B5%D5%B8%D6%82%D5%B6&action=edit&redlink=1)
2. Analysis of cost coverage (break-even point) of the project
3. [Statistical analysis of the project (Monte Carlo method)](https://hy.wikipedia.org/w/index.php?title=%D5%84%D5%B8%D5%B6%D5%BF%D5%A5-%D4%BF%D5%A1%D5%BC%D5%AC%D5%B8_%D5%B4%D5%A5%D5%A9%D5%B8%D5%A4&action=edit&redlink=1)
4. Business plan applications
   * Financial statements
   * [Audit](https://hy.wikipedia.org/wiki/%D4%B1%D5%B8%D6%82%D5%A4%D5%AB%D5%BF) reports
   * Expert opinions on property valuation
   * Technical descriptions of the product
   * CVs of key executives
   * The most important agreements and contracts
   * Information about the production process
   * Drawings and sketches of products
   * Market research reports
   * Excerpts from the most important legislative acts
5. Information about project support

The business development plan shall help the owner to solve the **following key issues**:

* determine the main fields of the company's activities
* target markets and the company's position in these markets
* formulate long-term and short-term goals of the company, strategy, and tactics to achieve them
* identify the persons responsible for the implementation of the strategy, select staff, draw up a list of goods and services offered by the company to consumers, and determine their indicators
* estimate the production and commercial costs of their creation and implementation
* identify the compliance of the personnel available in the company and the conditions of their motivation to work with the requirements necessary to achieve the goals set
* define a list of marketing research, advertising, sales promotion, pricing, sales channels, and other marketing activities of the company
* assess the financial condition of the company and the compliance of the available financial and material resources with the possibilities of achieving the set goals, predict obstacles and "underwater reefs" that may interfere with the practical implementation of the Business Development Program

The business development program shall help the owner to get answers to the following questions:

* what type of product or what new business shall be chosen to enter the domestic and foreign markets?
* what will be the market demand for the goods and services offered and how will it change?
* what resources and in what quantity will be required to organize a Business Development Program project?
* how much will the necessary resources cost and where to find reliable suppliers?
* how much will the costs of organizing the production and sales of products/services in the relevant markets amount to?
* what will be the market price of this product and how will it be affected by competitors?
* what can be the total income and how should it be distributed among all participants of the Business Development Program project?
* what will be the production efficiency indicators and how they can be grown?

**FORM AND DEADLINES OF REPORTS**

In addition to a Word document containing descriptions of all relevant analyses performed during the assessment of the project, it is expected that the participant will prepare and submit financial and economic tables for the feasibility study, which will be provided in the .xlsx format (tables should not be encoded and should have formulas presented with a space and allowing to track the correctness of the calculations performed). The customer will provide documents prepared at earlier stages of project development (project concept and simplified financial and economic analysis) after the conclusion of the contract.

The approximate duration of the preparation of the purchase item shall be 2 months.

The contracting party shall cooperate closely with the ministry responsible for the project in order to obtain the data required for the feasibility study.

After the completion of the feasibility study, the customer will submit his/her thoughts and/or comments, which shall be taken into account and sent by the contracting party within a month after their receipt.