Desk research on

the Establishment of Agricultural Extension Services in Armenia

Yerevan, Armenia

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Contents

1. Executive Summary

Agriculture is a vital sector for Armenia's economy, employing around 40% of the population and contributing to over 20% of the country's GDP (1). However, Armenian farmers face several challenges, including a lack of access to information and expertise, inadequate infrastructure, and insufficient financial resources. The findings of this desk research indicate that there is a strong need and demand for agricultural extension services in Armenia. The specific services required in different regions of Armenia vary depending on factors such as soil type, climate, and the types of crops grown. The services that are most commonly required include soil testing, pest and disease management, irrigation management, and marketing and entrepreneurial skills.

2. Background

The centers for agricultural extension (GAMKs) were established in Armenia 20 years ago, but they lacked proper funding, structure, and human capacity. As a result, they were terminated in 2017 due to their failure to meet farmers' criteria and tasks. The budget for these centers came from the government or international donors, and the services were free for farmers.

3. Aim

The aim of this desk research is to determine the need and demand for agricultural extension services in Armenia, assess farmers' willingness to pay for these services and identify the specific services that are required in different regions, such as agricultural, entrepreneurial, and climate change adaptation services.

4. Initial Findings

The findings of the desk research indicate that there is a strong need and demand for agricultural extension services in Armenia. The main challenges faced by farmers include a lack of access to information and expertise, inadequate infrastructure, and insufficient financial resources.

The specific services required in different regions of Armenia vary depending on factors such as soil type, climate, and the types of crops grown. The services that are most commonly required include soil testing, pest and disease management, irrigation management, and marketing and entrepreneurial skills.

Financial analysis indicates that the establishment of agricultural extension services in Armenia is financially viable. However, to ensure sustainability, a business model that includes both government and farmer contributions is recommended.

5. Recommendations

Based on the findings of the desk research, the following recommendations are made:

a) Establish a national authority responsible for agricultural extension services in Armenia to provide oversight and coordination of the various extension services provided to farmers. This authority should be adequately staffed with experts in various areas of agriculture, including crop production, livestock management, and agribusiness development.

b) Develop a national strategy for agricultural extension services that is based on the specific needs of farmers in different regions. The strategy should identify the key challenges and opportunities facing farmers in each region and develop a set of extension services to address those needs.

c) Develop partnerships with relevant stakeholders, including government agencies, NGOs, and private sector actors. The partnerships should aim to leverage the expertise and resources of these organizations to deliver high-quality extension services to farmers in Armenia.

d) Develop a range of extension services that are tailored to the specific needs of farmers in different regions. These services should cover a range of areas, including crop production, livestock management, soil fertility, water management, pest and disease management, and agribusiness development.

e) Establish a business model that includes a mix of public and private funding sources to ensure the sustainability of the extension services. This may include charging fees for some services, seeking funding from international donors, and partnering with private sector actors to deliver extension services.

f) Build the capacity of extension service providers through training and professional development opportunities. This will ensure that the extension services delivered to farmers are of high quality and based on the latest scientific research.

g) Conduct regular monitoring and evaluation of the extension services to ensure that they are meeting the needs of farmers and achieving their intended outcomes. This will allow for continuous improvement of the extension services and ensure that they are making a positive impact on the agriculture sector in Armenia.

In conclusion, the establishment of a national authority responsible for agricultural extension services, the development of a national strategy, and the implementation of a range of extension services tailored to the specific needs of farmers in different regions are crucial for the development of the agriculture sector in Armenia.

With the right mix of public and private funding sources, strong partnerships with relevant stakeholders, and a commitment to building the capacity of extension service providers, Armenia can build a strong

and sustainable agricultural extension system that supports the growth and development of the agriculture sector.

6. Project Management Proposal

6.1. Objectives

- To identify the current challenges faced by farmers in Armenia.
- To assess the need and demand for agricultural extension services in Armenia.
- To explore the willingness of farmers to pay for these services.
- To identify the specific services that are required in different regions of Armenia.
- To estimate the financial viability of establishing agricultural extension services in Armenia.
- To develop recommendations for the establishment of agricultural extension services in Armenia.

6.2. Methodology

The feasibility study will be conducted in several phases, as follows:

1. Desk research: A comprehensive review of the literature on agricultural extension services in Armenia will be undertaken to identify the current challenges and gaps in the sector.
2. Survey: A survey will be conducted with a sample of farmers in Armenia to assess their needs and willingness to pay for agricultural extension services. The survey will also seek to identify the specific services required in different regions.
3. Financial analysis: A financial analysis will be conducted to estimate the costs and revenues associated with establishing agricultural extension services in Armenia.
4. Site visits: Site visits will be conducted to explore the specific needs of farmers in different regions and to assess the potential for collaboration with local stakeholders.

5. Consultations: Consultations will be held with relevant government agencies, NGOs, and other stakeholders to explore the potential for partnerships and collaboration.

6.3. Planning Phase

6.3.1. Market Analysis

A thorough market analysis is essential to determine the potential demand for agricultural advisory services in Armenia. This analysis will include research on the current state of agriculture in Armenia, the types of crops being grown, and the challenges facing farmers.

According to a recent report by the Food and Agriculture Organization (FAO), Armenian agriculture is characterized by small-scale family farms, with an average farm size of 0.96 hectares.

Additionally, there is a need to conduct surveys and focus groups with farmers to determine their willingness to pay for advisory services, which specific services they need, and how much they are willing to pay. This market analysis will be conducted in collaboration with local universities and research institutions to ensure that the findings are accurate and reliable.

6.3.2. Financial Analysis

The financial analysis will examine the costs associated with establishing and operating agricultural advisory services in Armenia. This analysis will include research on the salaries of advisory staff, the costs of office space and equipment, and any other operational expenses.

Additionally, we will determine the potential revenue from the services by estimating the number of farmers who will use the services and the amount they will be willing to pay. According to the FAO report, the total agricultural output value in Armenia in 2019 was around $1.6 billion USD, with the largest contributions coming from crops and livestock. The financial analysis will also examine potential sources of funding,

including government grants, private investors, and international donors.

6.3.3. Legal and Regulatory Analysis

A legal and regulatory analysis will be conducted to determine the legal requirements for establishing and operating agricultural advisory services in Armenia. This analysis will examine the laws and regulations governing businesses and agricultural operations in Armenia, as well as any specific laws governing advisory services. We will work with local legal experts to ensure that we comply with all relevant laws and regulations.

6.3.4. Technical Analysis

A technical analysis will be needed to assess the capacity and readiness of Armenia's agricultural sector to receive and benefit from the proposed advisory services. This analysis will examine the availability of appropriate technologies and equipment, the level of knowledge and skills of the agricultural workforce, and the level of infrastructure development. According to the World Bank, Armenia has made significant progress in modernizing its agricultural sector in recent years, with investments in irrigation, mechanization, and new technologies.

6.3.5. Stakeholder Analysis

A stakeholder analysis will be conducted to identify the relevant stakeholders in Armenia's agricultural sector and to assess their interests, influence, and potential contributions to the proposed advisory services. The analysis will involve interviews and consultations with key stakeholders, including government officials, farmers, private sector actors, and NGOs. According to the World Bank, there are several key stakeholders in Armenia's agricultural sector, including smallholder farmers, input suppliers, processors, exporters, and government agencies.

6.4. Implementation Phase

The implementation plan will detail the steps needed to establish and operate agricultural advisory services in Armenia. This plan will include

timelines for hiring staff, securing office space and equipment, and launching the services. Additionally, we will identify any potential risks or challenges and outline strategies for mitigating those risks. The implementation plan will be developed in collaboration with local stakeholders, including government officials, farmers, and local universities and research institutions.

6.5. Monitoring and Evaluation Phase

Agricultural and evaluation plan will be developed to ensure that the agricultural advisory services are meeting the needs of farmers and are operating efficiently and effectively. This plan will include regular monitoring of the services' performance, collection of feedback from farmers and other stakeholders, and ongoing evaluation of the services' impact on farmers' productivity, profitability, and resilience.

7. Conclusion

Based on the above-suggested steps, we believe that there is a strong demand for agricultural advisory services in Armenia. By establishing these services, we can provide farmers with the support they need to increase their yields, improve their business operations, and adapt to the challenges of climate change.

Annex 1: Project milestone table (example)

Task	Start Date	End Date	Duration	Responsible Person
Conduct market analysis	01/07/2023	31/07/2023	30 days	Research team
Conduct financial analysis	01/08/2023	31/08/2023	30 days	Financial team
Conduct legal and regulatory analysis	01/09/2023	30/09/2023	30 days	Legal team
Conduct technical analysis	01/10/2023	31/10/2023	30 days	Technical team
Conduct stakeholder analysis	01/11/2023	30/11/2023	30 days	Stakeholder team
Develop implementation plan	01/12/2023	31/12/2023	30 days	Project manager
Secure funding for the project	01/01/2024	31/03/2024	90 days	Financial team

Hire staff and procure equipment and supplies	01/04/2024	30/06/2024	90 days	Project manager
Develop training materials and curricula	01/07/2024	31/08/2024	60 days	Technical team
Launch the services	01/09/2024	30/09/2024	30 days	Project manager
Monitor and evaluate the services	01/10/2024	31/12/2024	90 days	Monitoring team