ECOHEROES

Problem:

Pollution represents the contamination of the surrounding environment with substances that affect human health, quality of life, or the natural function of ecosystems. In most cases, pollutant substances originate from human activities.

The idea is to create a modern and efficient agricultural system, integrating eco-friendly greenhouses with solar panels for cultivating vegetables in controlled conditions throughout the year.

Description of this idea:

¤ Constructing an eco-friendly greenhouse that doesn't require polluting energy sources.
¤ Installing sensors, cameras, and a control system.
¤ Installing solar panels.
¤ Connecting the greenhouse to a platform to provide a controlled environment.

Advantages - we will have more free time, using sensors, we will monitor the "soil situation" and humidity. With the help of cameras, we will track how the plants develop. By installing photovoltaic panels, we will generate our own energy, save on electricity, and be able to recharge portable batteries to sell them.

Efficient growth:

Modern technologies control the greenhouse conditions (temperature, humidity, and lighting) to optimize plant growth.

Resource economy:

Sensors monitor humidity and other parameters to optimize the usage of water and other resources.

Benefits!

Year-round production:

Sensors and other technologies enable farmers to cultivate various crops in any season, extending the production period.

Renewable energy:

Solar panels contribute to reducing reliance on non-renewable energy by providing green energy.

Impact on people:

- Sensors and cameras will facilitate the work of farmers.
- Storage of electrical energy for potential sales.
- Increasing of organic product yields.

Impact on nature:

- Using of natural fertilizers.
- Utilizing free solar energy.
- Increasing in organically pure product (vegetable) yields.
- The environment is not polluted.

Budget:

No.	Materials	The cost of one unit	Units	Total cost
1	Solar (greenhouse)	1m2 1100 lei	50m2	55.000 lei
2	Surveillance cameras	1 Pc. 1470 lei	5 Pc.	7350 lei
3	Photovoltaic set	300.000 lei	3 set	900.000 lei
4	Soil and environmental sensors	1 Pc. 8300lei	2 Pc.	16.600 lei
5	Seeds	100 seeds 180 lei	300 seeds	540 lei
6	Total			979.490 lei

Marketing plan:
We will sell cucumbers and bell peppers at 20 lei/kg, and tomatoes at 25 lei/kg. Promotion will occur through direct proposals to buyers.
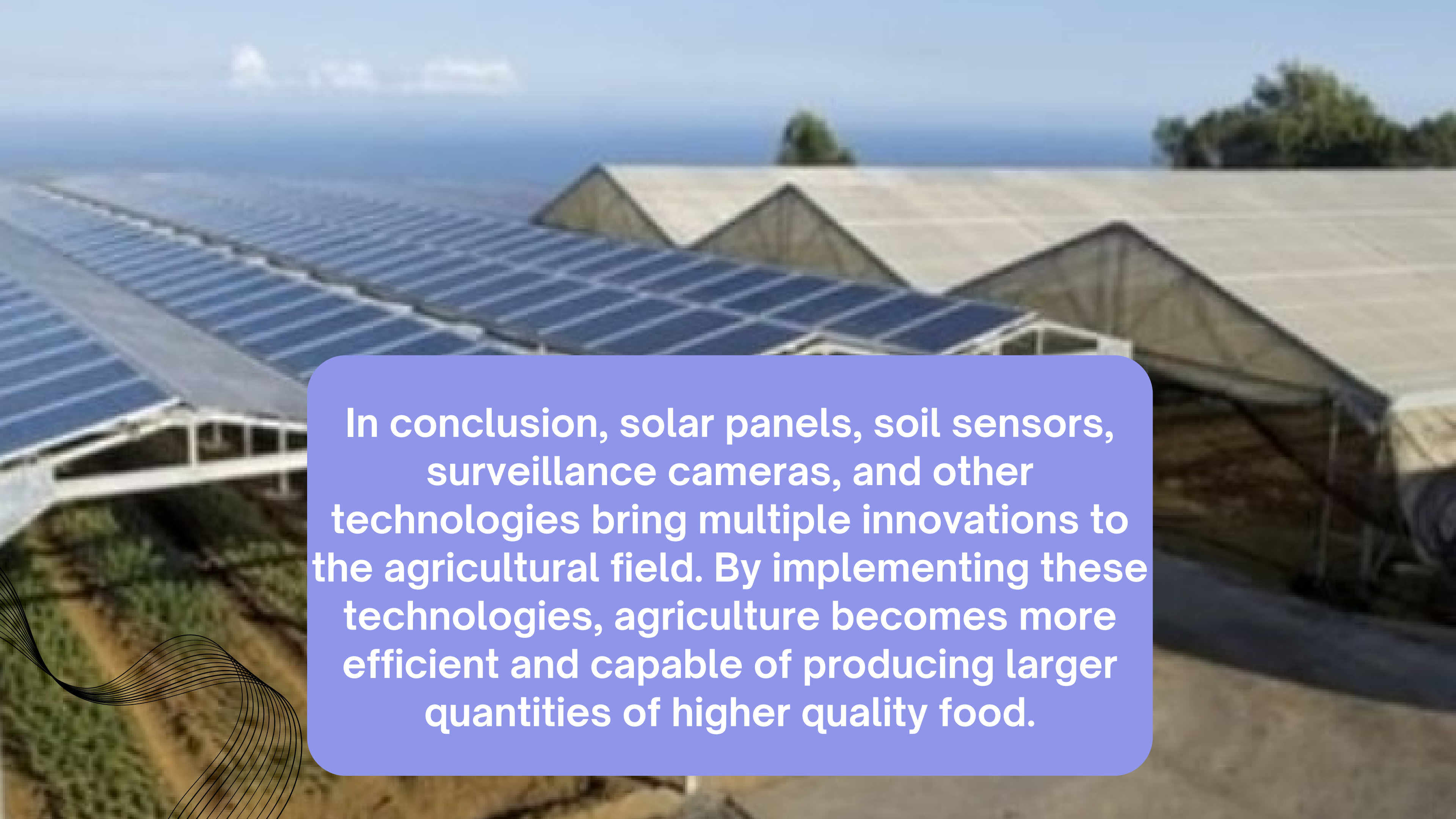
Financial information:
- Total annual costs (+3 workers): 1,015,490 lei
- Annual income: 600,500 lei
- Two-year period: 1,201,000 lei
- Profit: 185,510 lei

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- For 2 years: 1,201,000 lei
- Profit: 185,510 lei

In conclusion, solar panels, soil sensors, surveillance cameras, and other technologies bring multiple innovations to the agricultural field. By implementing these technologies, agriculture becomes more efficient and capable of producing larger quantities of higher quality food.

The team

My name is Aliona. I am 15 years old, I enjoy listening to music, and I like discovering new things in the field that interests me.

IG: alionash_01

My name is Vlad. I am 15 years old, I enjoy traveling, and I like to practice sports.

IG: vlad_xq_

My name is Mirela. I am 15 years old. I enjoy singing. I like to compose poems in my free time.

IG: mire.lush38

Thank you for your attention!