

Form 1.

Summary of the greenhouse establishment plan for cultivation of crops every season

1. Introduction to products or services

1.1. The goal of plan

The main goal of this plan is to establish greenhouse for cultivating summer crops in other seasons, producing mushroom and rose flower in an area of 20000 m² unit in Lorestan province. This plan will be exploited from 2017 with 17 personnel in 1 working shift of 12 hours and 365 day annually and will reach its 100% of the practical capacity by 2021.

1.2. Characteristics and advantages

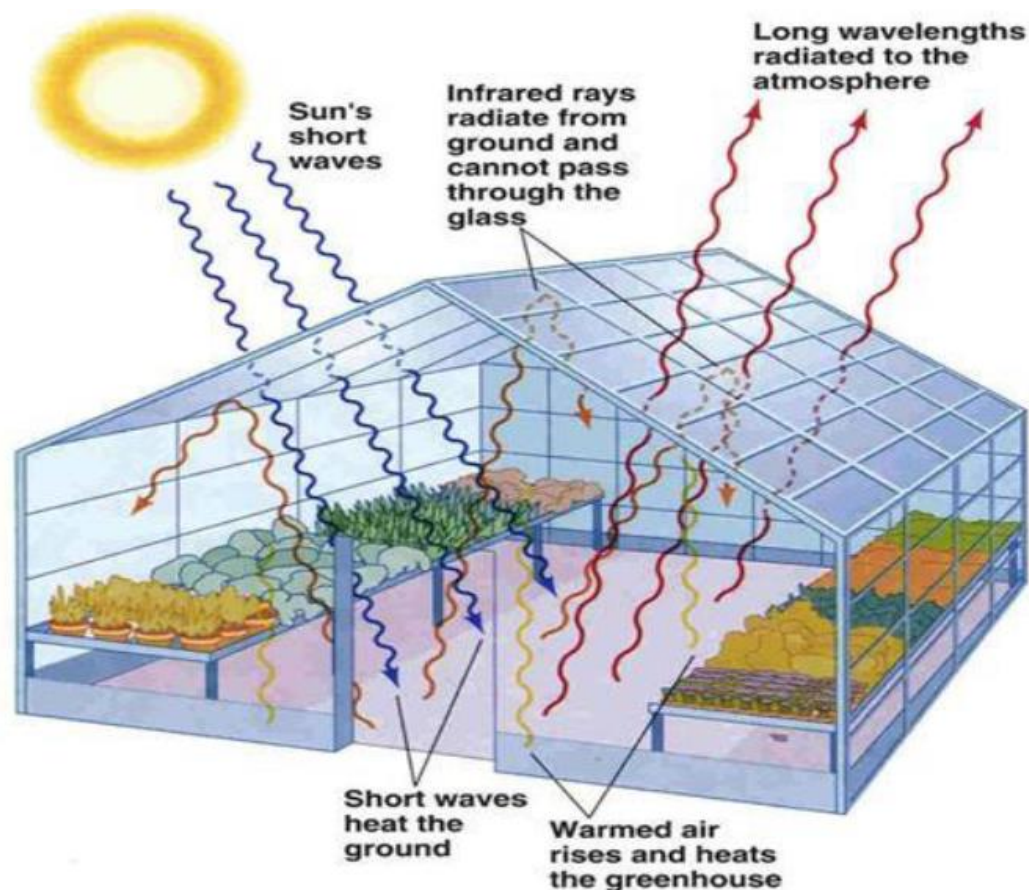
Each plant needs desirable conditions for growth in term of the light, daily temperature, night temperature, relative humidity and soil humidity. For producing and cultivating high quality plants in all seasons, there has to be suitable environmental situation along with loss factor control such as wind, destructive storms, coldness and freezing air and so on and a building called greenhouse is considered as the controlling environment. Based on the increasing market demands, whether on flower and decorative plants or on vegetables and summer crops in other seasons, his is one of the mostly profitable approaches in agriculture section which, of course, needs large amount of primary investments. Based on the high investment in this area, lack of desirable management in greenhouse establishment, site selection, type of greenhouse and its cover causes lack of efficiency of the investment and equipment. Due to particular climate and water limitations, Iran is among the countries needs highly to revise the cultivation system and in this line, the greenhouse cultivation development can be a suitable solution considered. What is important in this regard is to change the attitude toward this cultivation system and this belief has to be created that greenhouse cultivation system is substantially different from the traditional one and in addition to experience; it needs high knowledge on greenhouse.

The reasons for importance of greenhouse cultivation

1. Creating greenhouse and compact exploitation and making use of new technique, it would be possible for farmers with small lands and limited water sources to reach sufficient income; i.e. increasing the performance in unit leads to the sufficient profits.
2. Early maturation in vegetable and summer crops is an important income factor. The farmer would be able to at least provide the regions with early maturation of 1 month by its equipment and supply the products in other zones in every season of the year.
3. Greenhouse crops quality is high due to making use of pure seeds and is important for retailers and helps the economic importance of this situation.
4. Economical water usage due to the compact systems is another desirable facility in greenhouse production
5. Labor and human force required for producing 20 t crops in greenhouse is 1/3 of the outdoor production.

Form 1.

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1.3. Custom fees

Table1. Chips custom fees and tariffs

No.		Description	Tariff code	Fees %
1	Garden products	Fresh or cooled tomato	07020000	55
2		Tomato paste	20029010	55
3		Cucumber (small cucumber), protected temporarily	07114000	55
4	flower	Flower and bud, cut from the branch or for decoration, fresh, dried, whitened, colored, smeared	0603	55
5	mushroom	Earth abscess and other mushrooms protected temporarily, except Agaricus	07115900	20
6		Agaricus mushroom protected temporarily	07115100	50
7		Agaricus mushroom, protected except in vinegar or vinegar essence	20031000	45
8		Other dried mushrooms and earth abscesses even cut and fragmented, not mentioned elsewhere	07123900	20
9		Veiny transparent black dried mushroom used in Chinese restaurants (wood ears)	07123200	20
10		Other mushrooms, earth abscesses except fresh or cooled	07095900	20

Form 1.

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	Agaricus		
11	Dried Agaricus mushroom	07123100	50
12	Golden or orange winter dried gelatin mushroom	07123300	20
13	Other mushrooms except Agaricus mushroom prepared or protected except in vinegar or vinegar essence	20039000	45
14	Fresh and cooled Agaricus mushroom	07095100	50

1.4. ISIC code

The plant considered is for cultivation of greenhouse summer crops (cucumber and tomato). The ISIC code related to this product is not registered in the department of industry, mine and commerce systems, but following codes are related to the agricultural crops such as tomato, cucumber, flower and mushroom.

Table2. Product ISIC code

ISIC code	Description	Scale
0112512334	Tomato	Ton
0112512339	Cucumber	Ton
0112412356	Flower and bud	Ton
0112412364	Mushroom	Ton

1.5. Introduction to products application

Based on the fact that making use of the cultivated crops in traditional manner causes wastes and high costs for families in different dimensions; therefore, cultivating vegetables and summer crops and producing products in modern manners can be of positive impacts on the human life dimensions. Also, producing in this manner causes economical saves and significant efficiency over time.

2. Suggested sites

Based on surveys, the cities such as Kuh Dasht, Pol Dokhtar and Dorud and Delphan are suitable sited for establishing this unit.

3. Raw, auxiliary materials and consumables

Raw material required for this cultivating tomato and cucumber and mushroom are seeds, chemical and animal fertilizer and poisons which are supplied locally. For cultivating the rose, the rose stem is required which is found in decorative flower ails center.

4. Sales plan and target market (local and foreign)

Form 1.

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The target market at first is to supply locally in sections and then for additional production, the export would be done to Iraq and western neighbors.

Table3. Products production and sales plan

Description	2017	2018	2019	2020
Production capacity	100%	100%	100%	100%
Production level (t)				
Cucumber	162	162	162	162
Tomato	81	81	81	81
Mushroom	50	50	50	50
Rose flower	500000	500000	500000	500000
Sales level				
Cucumber	4050	4050	4050	4050
Tomato	2025	2025	2025	2025
Mushroom	3250	3250	3250	3250
Rose flower	10000	10000	10000	10000
Total sales (m.Rial)	19325	19325	19325	19325

5. Annual nominal and practical capacity

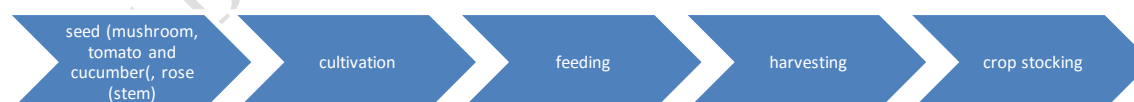
Nominal capacity

The Nominal capacity is the production in ideal situation. This capacity is registered by the machineries manufacturers and is based on the engineering and designing principles

5.2. Practical capacity

The practical capacity is the maximum available capacity in typical situation which is considered as a percentage of the nominal one. The practical capacity for tomato, cucumber and mushroom production is 293 ton and for rose flower is 500000 ton annually in 365 days.

6. Production procedure and technology



7. Investment costs

7.1. Fixed investment

Table4. Investment costs

No.	Description	Costs			
		Dollar	Rial	Rial	Total

Form 1.

Summary of the greenhouse establishment plan for cultivation of crops every season

1	Land	0	0	4000	4000
2	Landscaping	0	0	3225	3225
3	Building construction	0	0	6080	6080
4	Machineries and equipment	0	0	21073	21073
5	Branches and installation	0	0	768	768
6	Vehicles	0	0	538	538
7	Service and official equipment	0	0	82	82
8	Other and unpredicted costs (5% of above costs)	0	0	1788	1788
9	Pre-exploiting costs	0	0	198	198
10	Total fixed investment costs	0	0	37752	37752
11	Working capital in 100% of capacity	0	0	2113	2113
12	Total investment costs	0	0	39865	39865

7.2. Working capital

Table5. Working capital

No.	Description	Day	1 st year	Base year
1	Raw and auxiliary materials	120	532	532
2	Current and produced products inventory	30	581	581
3	Debts	30	597	597
4	Cash	30	403	403
Total			2113	2113

8. Production costs

Table6. Production costs

Description	Total costs (m.Rial)
Raw and packing material	1595
Energy	548
Repair, maintenance and spare parts	1283
Personnel's salary	3100
Unpredicted (6%)	391
Depreciation	3136
Insurance	57
Sales and official costs	193
Total operational and non-operational production costs	10302

9. Economic indices

Description	Amount-measurement scale
NPV	292994 m Rial

Form 1.

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IRR	25.23%
PBP	4.59 years equal to 2020

Plan and Budget Organization of Lorestan province

PROJECT PROFILE – SUMMARY SHEET

Project Introduction

1. Project title: the greenhouse establishment plan for cultivation of crops every season

2. Sector: agriculture, hunting and dependent services

Sub sector: vegetables vegetation, gardening in order to produce particular products and greenhouse crops.

3. Products/Services: tomato, cucumber, mushroom, cut roses

4. Location: ... Free zone Economic special zone Industrial Estate Main Land

5. Project description:

Due to arid and semi-arid climate of the Iran and reduction of raining in recent decade, the authorities were encouraging to establish greenhouses and investment in this regard. In greenhouse the production is 10 times more than the simple situation due to growth factors such as humidity, light, temperature and air conditioning. But, what distinguishes the greenhouse vegetation from other types is to make optimal and principal energy uses. In comparison with other types of cultivation, greenhouse cultivation has the modifiable and controllable soil and irrigation efficiency would be higher in this cultivation by more than 90%. In greenhouse cultivation, water is used suitably for plants and this causes that pests and diseases would be reduced and products would be of high quality.

6. Annual capacity: tomato, cucumber and mushroom: 293 t, rose flower: 500000

Project Status

7. Local / internal raw material access 100 %

8. Sale: 100% locally

- Anticipated export market 0 %

9. Construction Period 24 month

Beginning of activity: 03/2016

In-site beginning of activity: 03/2016

End of project: 02/2018

Commercial activity beginning: 03/2018

Project Status

10. Project Status:

- Feasibility study available? Yes No
- Required land provided? Yes No
- Legal permissions (establishment license, foreign currency quota, environment, etc) taken? Yes No
- Partnership agreement concluded with local/foreign investor? Yes No
- Financing agreement concluded? Yes No
- Agreement with local / foreign contractor(s) concluded? Yes No
- Infrastructural utilities (electricity, water supply, telecommunication, fuel, road, etc) procured? Yes No
- List of know-how, machinery, equipment, as well as seller / builder companies defined? Yes No
- Purchase agreement for machinery, equipments and know- how concluded? Yes No

Financial Structure

11. Financial Table

Description	Local Currency Required			Foreign Currency Required Million Dollar	Total Million Dollar
	Million Rials	Rate	Equivalent in Million Dollar		
Fix Capital	37752	34530	1.09	0	1.09
Working Capital	2113	34530	0.06	0	0.06
Total Investment	39865	34530	1.15	0	1.15

- Value of foreign equipment/machinery 0 million dollar
- Value of local equipment/machinery 0.61 million dollar
- Value of foreign technical know- how 0 million dollar
- Value of local technical knows- how 0 million dollar

- Net Present Value (NPV): 2929.94 Million Rial for Year
- Internal Rate of Return (IRR) 25.23%
- Payback Period (PP) 4.59 Year (2020)

General Information

12. Project Type : Establishment Expansion and completion

13. Company Profile:

-Name (legal /natural persons): Sepinud Shargh institute of strategic studies

-Company Name: engineering consultation

-Address: unit 5, No. 3, Boostan 3 St., Pasdaran, Tehran

-Tel: 02122584901

Fax: 02122580343

-E-mail: info@sepinud.com

Web site: www.sepinud.com

-Local entrepreneur : private sector public sector other

Please attach follow documents if available

- Pre-feasibility study ■
- Feasibility study □
- Legal permissions (establishment license, foreign currency quota, environment, etc) □

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