











Control Farming and Green Energy Bring the Power of Green



SIKCO[®] Green

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Proposal

Business Plan/SIKCO/June (product/market requirements document) June, 2019 Issue v. 0.1

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Document Information

Project Name :	Proposal for Control Farming & Green Energy			
Project Manager :	Anand Kamble	Document Version No :	1.0	
Opportunity Roadmap : Prepared By :	Proposal Archana Sikder	Document Version Date : Preparation Date :	21/06/19 21/06/19	
Reviewed By :	Milton Sikder	Review Date:	21/06/19	

Distribution List

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Version History

Ver. No.	Ver. Date	Revised By	Description	Filename
1.0	21/06/19	NA	Proposal	Proposal for Control Farming & Green Energy

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Submitted by :

Name	Position	Signature	Date
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Legal Page

Confidentiality Agreement

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It is acknowledged by reader that information to be furnished in this business plan is in all respects confidential in nature, other than information which is in the public domain through other means and that any disclosure or use of same by reader, may cause serious harm or damage to SIKCO.

Upon request, this document is to be immediately returned to -

SIKCO House, B-97, Sector-12, Kharghar-410210.

Archana Selder

Signature ARCHANA SIKDER

DIRECTOR

21/06/19

Date

This is a business plan. It does not imply an offering of securities. Also scientific and technological elements have not gone through rigorous scientific review.

Dear Sir,

SIKCO (Society of Innovation, Knowledge for Cost Optimization) is pleased to offer solution on Solar Plant solution for cost optimization through alternative energy. The proposed solution is based on high-quality; high-performance SIKCO offerings that can help you to reduce energy consumption level by 70-80% with solar energy.

You can have confidence in the proposed approach because **SIKCO** has assisted customers with the successful deployment of similar business solutions.

We look forward to meeting with you to discuss the benefits of our proposed solution, and to explore the next steps in forging a strong and mutually beneficial business relationship if needed.

With Regards. Sincerely,

MILTON SIKDER CEO For SIKCO Engineering Services Pvt. Ltd.



About SIKCO

SIKCO is a very well-known brand in India amongst other companies in Renewable Industry. Started in the year 2007, by **Mrs. Archana Sikder**, a science graduate with specialization in the field of renewable energy, as a First-Generation Entrepreneur.

We are operating for more than 10 years in this industry with wide Innovation of green products to reach a common man. We offer unrivalled breadth and depth of products and integrating technologies across platforms including green energy products – both Grid and off grid types, Solar Water Heater, Solar Street Lights, PolyHouse, Hydroponics etc. SIKCO is ISO 9001:2015, ISO:14001 certified for our Quality Management System.

With the success of practical knowledge and experience, SIKCO has now reached a stage where in, it can show its expertise of product manufacturing, technology support, new application developments with start-up companies situated outside. SIKCO have sister organizations as Green MCF, Uptime Green Technologies Pvt. Ltd.

We Offer

Poly House

Green Net House





Hydroponics



Aquaponics



Animal Fodder Machine



Integrated street Light

Vertical Organic Farming



Biogas Plant



Solar Pumping System



Drip and Fogger System





SIKCO POLY HOUSE





1.0 EXECUTIVE SUMMARY:

- (A) Large size poly house area shall be 5000 sq. meter and above
- (B) Medium size poly house area shall be 2000-5000 sq. meter
- (C) Small size poly house area shall be 72-2000 sq. meter
- (D) Poly house provide control environment for better plant growth
- (E) The power required will be 05-10 KVA and water 10,000 liters per day for a 4000 sq. m operational traditional playhouse.

2.0 THE PRODUCT AND MARKET:

- (A) Preferred vegetables are Capsicum, Cucumber, Tomato, Parsley, Coriander, Broccoli etc.
- (B) Premium Hotels are main clients.

3.0 TECHNOLOGY:

Two types of Greenhouse are suitable in Indian weather.

- (A) Naturally Ventilated Greenhouse.
- (B) Greenhouse with Fan and Pad Cooling system.

Yield of various food and payback are described below



4.0 PROCESS:

The flow sheets of site and field operations are -

Selection of Site \rightarrow Soil & Water Analysis \rightarrow Removal of Surface Soil \rightarrow

Mixing with Fertilizer & Pesticides \rightarrow Refilling \rightarrow Preparing drains & beds \rightarrow Installation of Green House \rightarrow Cover roof with shading net \rightarrow Fumigation \rightarrow Plantation \rightarrow Drip & Fogging \rightarrow Harvesting \rightarrow Grading \rightarrow Packaging.

5.0 ORGANIZATION AND MANPOWER:

The manpower requirement -

- a) Production Manager (Agronomist).... 1
- b) Skilled Workers..... 4

Total

5

6.0 PLANT AND EQUIPMENTS:

GI fabricated green house structure, Drip irrigation, Fogging system, UV stabilized Poly sheets of 200 microns, 50% shading net around . All materials will be used as per NHB norms.

7.0 ESTIMATED PROJECT COST FOR POLYHOUSE:

SN	Description	Unit	Qty	Rate	Amount
1	Poly House with GI Structure, Drain, Foundation, Doors, 200 microns, UV protected poly sheet and all accessories.	Sq. m	4000	844	3376000
2	Drip & Fogger System, water treatment plant	Sq. m	4000	100	400000
3	Levelling, Bed Preparation & Agri Materials	Sq. m	4000	50	200000
4	Agronomist Service for 01 year	Visit	24	4000	96000
5	Plant Sapling	No	14910	16	192000
6	Subsidy liasoning	Includin	g		
				Total	4264000
	Subsidy 50% on Serial No 1	Actual cost to owner			2576000

8.0 MEANS OF FINANCING:

The proposed means of financing for capsicum project will be - (Rs. in lakhs)

Total (Lakhs)	Rs. 42.64
3) Promoter's Contribution	Rs. 25.76
2) Subsidy from the NHB	Rs. 16.88
(After deduction of subsidy, actual loan demand	d is Rs lakhs)
1) Term loan from the Bank @ 11 % rate of intere	st per annumRs

[Subsidy will be deposited after commissioning of the project. So, promoter has to arrange the amount of the project from Bank or other sources.]

9.0 **PROFITABILITY**:

Assumptions:

- 1) The capacity utilization of the proposed unit is assumed at 60% in the 1st year and 90% in subsequent years.
- 2) The average price per kg. of capsicum has been accounted at Rs.40/-
- 3) The revenue from domestic market has purposely not been accounted for, as it may be a cushion for price and other variations.
- 4) The rate of interest p.a. for the loans of Bank or other Financial Institutions has been computed at 11% p.a. Respectively for 4 years.

The cash flow statement for the period of 4 years has been presented below -

		Year of Operation			
SN,	Particulars	. 1 .	2 .	3	4
· 1 .·	Sales	16,00,000	16,00,000	16,00,000	16,00,000
2	Cost of Prod. (Approx.)	4,00,000	4,00,000	4,00,000	4,00,000
. 3 .	Interest (approx.)	. 77,000 .	55,000	33,000	11,000
4	Total Exp.	4,77,000	4,55,000	4,33,000	4,11,000
5	Net Profit	11,23,000	11,45,000	11,67,000	11,89,000

* Selling rate are variable (min. 40 Rs/kg. to 250 Rs. /kg. max.).

* Exp. is depending upon labour rate mainly.

Pay-back period: 3.95 years

10.0 SUMMARY AND CONCLUSIONS:

Most organic vegetables are costly but most popular in International Hotels and Restaurants. In maintaining the quality, it is suggested 8 to 10 days of storage in freezer, without any spoilage. But if you are supplying in domestic market cold storage is not necessary. If capsicums, it is also suggested in the project to cultivate 3 varieties of capsicums with proper product-mix based on International price and market tie-up.

11.0 BUILDER OF GREEN HOUSES:

SIKCO Engineering Services PVT. LTD.

12.0 DOCUMENTS TEQUIRED FOR LOAN AND SUBSIDY:

- 1. 7/12 and 8/A,
- 2. Aadhaar Card, Pan Card,
- 3. Map of Proposed Land,
- 4. Light bill (Agriculture),
- 5. Ration card,
- 6. 4 pp–size photos,
- 7. Applicant's Signature in JPG format.

13.0 PAYMENT TERMS:

- 1. Rs. 10,000/- at the time of agreement.
- 2. Rs. 50,000/- (Draft payable to Horticulture board) for subsidy application.
- 3. 90% of the total cost of the project advance for structure, drip and fogger, bed preparation and planting material.
- 4. 10% against Installation and Commissioning

13.1 CALCULATION OF PLANTATION COSTING CAPSICUM:



Cost of Cultivation:

Sq. meter.	4000		
Plant per sq. meter	3.55		
No. of Plants	14200		
Mortality 5 %	710		
	14910	16	74550

Gross Production per Season (8 months)

Item Name	Tons	Rate (Rs.)	Amount (Rs.)
Capsicum	40	40000	1600000



Cost of Cultivation

Sq. Meter	4000		
Plant Per Sq. Meter	6.50		
No. of Plants	26000		
Mortality 5 %	1300		
	27300	30	819000

Gross Production per Season (1 year)

Item Names	Tons/Nos.	Rate	Amount
Gerbera	700000	3	2100000

TOMATOES



Cost of Cultivation

Sq. Meter	4000		
Plant per Sq. Meter	3.50		
No. of Plants	14000		
Mortality 5 %	700		
	14700	10	147000

Gross Production per Season (08 months)

Item Names	Tons	Rate	Amount
Tomatoes	100	12500	1250000

CHILLIES



Cost of Cultivation

Sq. Meter	4000		
Plant per Sq. Meter	3.50		
No. of Plants	14000	•	
Mortality 5 %	700		
	14700	9	132300

Gross Production per Season (8 months)

Item Names	Tons/Nos.	Rate	Amount
Chillies	55	30000	1650000

AMERICAN ROSE



Cost of Cultivation

Sq. Meter	4000		
Plant per Sq. Meter	3.50		
No. of Plants	14000		
Mortality 5 %	700		
	14700	20	294000

Gross Production per Season (01 year)

Item Names	Tons/Nos.	Rate	Amount
American Rose	6000000	4	2400000

CHERRY TOMATOES



Cost of Cultivation

Sq. Meter	4000		
Plant per Sq. Meter	3.50		
No. of Plants	14000		
Mortality 5 %	700		
	14700	33	485100

Gross Production per Season (6 months)

Item Names	Tons/Nos.	Rate	Amount
Tomatoes Cherry	40	30000	1200000

CARNATION



Cost of Cultivation

Sq. Meter	4000		
Plant Per Sq. Meter.	6.75		
No. of Plants	27000		
Mortality 5 %	1350		
	28350	33	935550

Gross Production per Season (6 months)

Item Names	Nos.	Rate	Amount
Carnation	900000	2.5	2250000

BROCCOLI



Cost of Cultivation

Sq. Mtr.	4000		
Plant Per Sq. Mtr.	2.25		
No. of Plants	9000		
Mortality 5 %	450		
	9450	55	519750

Gross Production per Season (4 months)

Item Names	Tons/Nos.	Rate	Amount
Broccoli	50	30000	1500000

PARSLEY



Cost of Cultivation

Sq. Meter	4000		
Plant per Sq. Meter	40.50		
No. of Plants	162000		
Mortality 5 %	8100		
	170100	4	680400

Gross Production per Season (3 months)

Item Names	Tons / Nos.	Rate	Amount
Parsley	70	30000	2100000

CORIENDER



Cost of Cultivation (Coriander)

Sq. Meter	4000		
Plant Per Sq. Meter	75.00		
No. of Plants	300000	_	
Mortality 5 %	15000		
	315000	0.15	47250

Gross Production per Season (3 months)

Item Names	Tons	Rate	Amount
Coriander	25	15000	375000

SHED NET HOUSE



ESTIMATED PROJECT COST (SHED NET HOUSE):

SN	Description	Unit	Qty	Rate	Amount
1	Green shed net House with GI Structure, Foundation, Doors, UV protected 50% perforated shed net and all accessories.	Sq. m	4000	610	2440000
2	Drip & Fogger System	Sq. m	4000	100	400000
				Total	2840000

HYDROPONIC FODDER PLANT



ESTIMATED PROJECT COST (HYDROPONIC FODDER PLANT):

SN	Description	Unit	Qty	Rate	Amount
1	Hydronic Fodder Machine with HDG Structure, Humidity and nutrient management system, Foundation, Doors, PVC / GRP heavy duty tray, UV protected poly sheet and all accessories.	Kg/Day	250	490000	490000
2	Drip & Fogger System				

HYDROPONIC PLANT



ESTIMATED PROJECT COST (HYDROPONIC PLANT 1):

SN	Description	Unit	Qty	Rate	Amount
1	Hydronic Plant with HDG Structure, Humidity and Nutrient Management System, Doors, PVC / GRP heavy duty tray, Main Channel 4" dia, Piping 25 mm dia uPVC, Net Pot 2" dia, Clay ball, Coco Disc, Reservoir, Pumps and all accessories.	Pot 2" dia	2000	300	600000
2	Drip & Fogger System				

ESTIMATED PROJECT COST (HYDROPONIC DUTCH BUCKET):







SN	Description	Unit	Qty	Rate	Amount
1	Hydronic Plant with Dutch Bucket, Piping 25 mm dia uPVC, Net Pot 6" dia, Clay ball, Coco disc, Reservoir, pumps and all accessories.	Pot	500	800	400000

ESTIMATED PROJECT COST (VERTICAL HYDROPONIC FARMING):



SN	Description	Unit	Qty	Rate	Amount
1	Hydronic vertical plant with Structure, Humidity and nutrient management system, PVC / FRP heavy duty 300 mm dia tray and all accessories included.	Meter	200	3500	700000
2	Drip & Fogger System				

ESTIMATED PROJECT COST (HYDROPONIC FODDER PLANT):



SN	Description	Unit	Qty	Rate	Amount
1	Integrated 12 watts LED solar lights, simple design, fashionable, compact, practical Adopting solar energy as power supply, Green energy, low carbon, environmental protection Adopting lithium-ion ferrous phosphate battery, all accessories.	Set	100	20000	2000000
2	Foundation & Erection				

ESTIMATED PROJECT COST (10 M3 BIOGAS PLANT) :





SN	Description	Unit	Qty	Rate	Amount
1	Portable 10 m3 biogas plant with digester, gas holder Supporting structure: steel structure, Tank material: HDPE thickness: 5-10 mm, Volume: 10 m3, , Service lifetime: more than 20 years, Performance: Anti-UV , Temp range: (-25)°C ~ (+60)°C, and all accessories.	10 M3	01	490000	490000
2	02 Months operation and maintenance included				

ESTIMATED PROJECT COST (SOLAR PUMPING SYSTEM):



SN	Description	Unit	Qty	Rate	Amount
1	Supply, Installation, Testing and Commissioning of Solar Water Pumping System, including MMS, Solar panel, Pump set, Cables etc. complete.	Нр	01	60000	60000
2	Foundation & Erection				

Note:

- 1. Taxes extra wherever applicable.
- 2. All are turnkey project.
- 3. Delivery starts in 07-15 working days and completion in 45 days