

# Strawberry + Spinach



## Project Estimate

**“Strawberry”** Vertical, Controlled Environment Agriculture



## INVESTMENT DETAILS

Sl#	Item	Unit	Qty	Rate	Amount	Rem
<b>CEA (FAN AND PAD) POLYHOUSE</b>						
01	<b>44x28 Sqm.</b>	Sqm	1232	2100	2,587,200.00	
02	Air circulation Fans	Ea.	12	L/S	96,000.00	
<b>INTERNAL STRUCTURE (40x24m)</b>						
01	<b>GI Sqr. tube (Pri Pole)</b> 40x40mm x 2.6 mm thk, 3M height ( <b>3Kg/m</b> ) 13P x 20+1R (136x6m tube)	Kgs	2,448	100	244,800.00	
02	<b>GI Sqr. tube (Footing)</b> 32x32mm x 2.6 mm thk, 1m height, ( <b>2.5 Kg/M</b> ) 1m x 13P x 21R (46x6m tube)	Kgs	690	100	69,000.00	
03	<b>MS Angle (Layer)</b> 40x40x3mm thk, 1m Length ( <b>1.8 Kg/m</b> ) 13P x 5L x 1M x 21R (228x6m)	Kgs	2,463	80	197,040.00	
04	<b>MS Angle (Bag supp)</b> 25x25x3mm thk, 10,080m ( <b>1.10 Kg/m</b> ) 24m x 2x 5x 2L x 21R (1680x6m)	Kgs	11,088	80	887,040.00	
04A	<b>MS Flat bar (Bag supp)</b> 25x3mm, (5,040m) 0.3m Length ( <b>0.6 Kg/m</b> ) 0.3x 80/R x 10x 21 (840x6m)	Kgs	3,024	80	241,920.00	
05	<b>MS Angle (V-Top sppt.)</b> 40x40x3mm thk, 1m Length ( <b>1.8 Kg/m</b> ) 40m x 7 (50x6m)	Kgs	540	80	43,200.00	
06	10mm Rebar for firm support for Pipes in footing: 150mm x 2 x 273P) ( <b>0.617 Kg/M</b> ) <b>84M</b>	Kg	51.85	80	5,000.00	
07	PCC 1:3:6 (M10) (600mm x 300mm x 300 mm) 2ft x 1 ft x 1 ft (0.6 x 0.3 x 0.3) <b>0.042 Cum.</b> <b>260 footings</b>	Cum.	11	L/S	55,000.00	
<b>GROWBAG AND SUBSTRATE</b>						
01	LDPE, 200 micron lay-flat growbag, 30x20x100cm		6000m x 30Rs		180,000.00	
02	Cocopeat (432 Cum)	Blocks	6,200	140	930,000.00	
<b>FERTILIZER AND OTHER INPUTS</b>						
01	Fertilizers, Bio fertilizers and controls			L/S	600,000.00	
<b>IRRIGATION</b>						
01	Complete irrigation system: Drip, foggers, pumps, Automated filter systems with pumps.			L/S	9,00,000.00	
<b>WATER AND INPUTS STORAGE</b>						
01	Tanks (5000Lx4)			L/S		
02	PVC / STEEL Water storage tank (50K L)			L/S	400,000.00	
Page sub total					<b>7,436,200.00</b>	



SI#	Item	Unit	Qty	Rate	Amount	Rem
<b>IOT SYSTEM / WEATHER STATION/ SURVEILLANCE</b>						
01	Automated system (Soil Volumetric, Humidity, Temperature sensors, pH/EC auto adjustment with peristaltic dozer pumps )			L/S	700,000.00	
02	CCTV surveillance system			L/S	100,000.00	
<b>Motor-cart, Bag lifters, Scissor lifts STEP LADDER WITH CASTERS (Wheels)</b>						
01	Ladders, Wheelbarrows, testing equipment			L/S	200.000.00	
<b>SPRAYER</b>						
01	Portable/ Power sprayer (Battery), pro-tray, Misc.				150,000.00	
<b>GROUND COVER / WEED CONTROL MAT</b>						
01	150-micron, HDPE ground weed mat	Cum.	1280	50	64,000.00	
<b>SEED/SEEDLINGS</b>						
01	Strawberry plants	Ea.	40,000	15	600,000.00	
	Spinach Seeds	Kgs	400	500	200,000.00	
<b>Packaging material</b>						
01	Punnets, MAP bags/containers, Stickers				1,650,000.00	
<b>SUBSTRUCTURE (with complete works till transplantation)</b>						
01	Internal Structural work (Structure erection including civil works, growbag installation, substrate filling, weed mat installation, Assisting drip irrigation personals during irrigation installation.				600,000.00	
<b>WATER</b>						
01	4 stage RO plant ( Based on water quality can be decided)				350,000.00*	
<b>POWER BACKUP / COLD STORAGE ROOM</b>						
01	10 Ton, cold storage room				900,000.00	
02	Solar / Inverter system				1,000,000.00	
<b>Nursery</b>						
01	Racks with LED lights				200,000.00	
<b>Page sub total</b>					<b>6,714,000.00</b>	
<b>Total investment with consultancy</b>					<b>15,848,224.00</b>	



Modified Atmosphere Packaging (MAP): Punnets and Pouches



## ECONOMICS

<b>Investment</b>	<b>15,848,224.00</b>
<b>Total seedlings</b>	<b>36,800</b>
RR20"xPP10"x24m (92Px2PRx10PLx20R: <b>36,800</b> )	36,800
Vertical layers	5
<b>Yield (per plant / pocket)</b>	
Strawberry:	0.300 – 0.500 Kgs
Spinach:	0.150 – 0.250 Kgs
<b>Gross yield</b>	
Strawberry : gross yield / crop cycle	<b>11,000 Kgs</b>
Spinach: gross yield / crop cycle x 7 cycles ( <b>5,520 Kgs x 7</b> )	<b>38,640 Kgs</b>
<b>Crop cycle</b>	
Strawberry	<b>1 cycle/year</b>
Spinach	<b>7 cycles/year</b>
<b>Gross Income</b>	<b>7,000,000.00</b>
(Considering a farmgate price with MAP packaging)	
Strawberry	<b>3,300,000.00</b>
Spinach	<b>3,800,000.00</b>
<b>Recurring charges</b>	<b>3,600,000.00</b>
Seeds / seedlings	700,000.00
Fertilizers	500,000.00
Labour	600,000.00
Utility and Misc.	600,000.00
MAP Packaging	800,000.00
Transportation	400,000.00
<b>Net Income</b>	<b>3,400,000.00</b>

- The yield may subject to vary as per the climatic conditions, Varietal selection and practices adopted.
- The farmgate prices are considered here is an average price, is subject to vary per the city / Markets.

## CROP CYCLE / ACTIVITIES

Year	Annual scheduling / activities																			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec								
<b>First</b>									SB			SB	SB	SB	SB	SB	SB	SB	SB	SB
<b>Second</b>	S	S	S	S	S	S	S	S	S	SB			SB	SB	SB	SB	SB	SB	SB	SB
<b>Third</b>	S	S	S	S	S	S	S	S	S	SB			SB	SB	SB	SB	SB	SB	SB	SB
<b>Fourth</b>	S	S	S	S	S	S	S	S	S	SB			SB	SB	SB	SB	SB	SB	SB	SB
<b>Fifth</b>	S	S	S	S	S	S	S	S	S	SB			SB	SB	SB	SB	SB	SB	SB	SB
<b>Sixth</b>	S	S	S	S	S	S	S	S	S	SB			SB	SB	SB	SB	SB	SB	SB	SB
<b>Seventh</b>	S	S	S	S	S	S	S	S	S	SB			SB	SB	SB	SB	SB	SB	SB	SB
<b>Eighth</b>	S	S	S	S	S	S	S	S	S	SB			SB	SB	SB	SB	SB	SB	SB	SB
<b>Ninth</b>	S	S	S	S	S	S	S	S	S	SB			SB	SB	SB	SB	SB	SB	SB	SB
<b>Tenth</b>	S	S	S	S	S	S	S	S	S	SB			SB	SB	SB	SB	SB	SB	SB	SB

	Transplanting / dibbling	Crop growing phase
	Harvesting	SB: Strawberry; S: Spinach

\*\*Cycles/Yield is subjected to various factors. It may vary from region to region, climatic conditions, varietal selections, and practices.



## INFORMATION

**(Turnkey project / LCCC (Landlord Cropping, Company Consultancy))**

<b>These prices are without any government subsidy.</b>
<b>Uninterrupted power and water supply is mandatory for the project.</b>
While making estimate we have considered everything, but their estimated prices / expenses are not included while final calculations eg., Quarters for labours, Packing/storage room, Fencing, Generator / Solar system, UPS, etc., (Excluding Land). If any of the facilities / things aforementioned preexist, the same can be utilized for the project, if not essential things can be mandatorily required to setup/procure if they are found inevitable. Client should be notified in advance for the same and required arrangements should be done by the client within the scheduled / requested time duration.
<b>Materials procurement and all the works are strictly done by our authorized associates, agencies or sub-contractors only.</b>
We share complete Bill-of Quantity (BoQ), Drawings, other operation procedures and schedules for easy and effective operation with clients.
<b>Above mentioned Prices are subjected to escalation. Freight charges and IGST are inclusive (Will be notified prior to the procurement if necessary for any discrepancies).</b>
<b>FYI: Gronatura reserves all the rights to use/implement new material / technology any time without prior information / approval of the clients.</b>

## TERMS AND CONDITIONS

Items	Descriptions
<b>Payment</b>	75% in advance along with Purchase order / Project confirmation. 25% before commencement of the internal structure works.
<b>Delivery schedule</b>	15 days from the receipt of the first payment.
<b>Completion schedule</b>	75-90 days from the date of the delivery schedule.
<b>Taxes and freight</b>	All-inclusive in the estimate
<b>Arbitration</b>	Palakkad jurisdiction only
<b>Bank Account details</b>	<b>GRONATURA CONSULTANCY</b> <b>Current A/C #: 250905000524</b> <b>IFSC: ICIC0002509</b> <b>BANK: ICICI BANK, BRANCH: VICTORIA COLLEGE,</b> <b>PALAKKAD, KERALA, 678001.</b>

Owner must arrange temporary accommodation to all workers at site / Project land. If the accommodation is far from the workplace, adequate transportation facilities should be provided to the workers.

Owner must provide potable water, uninterrupted power supply during the project execution.

Owner or their concerned and authorized people must bring to the knowledge of the consultancy about any discrepancies of materials, work etc... with in 48 hours of the receipt/execution of the same.

Owner must provide and ensure safety and security of all the material at work site.

Owner must construct Control room and storage rooms for irrigation/fertigation system and fertilizers, other inputs, and accessories storage.

Any damaged caused due to unscientific storage or ignorance by the owner / related people can't be entertained. The loss caused by the aforementioned must be borne by the owner, if it doesn't fit the rule books of the manufacturers / suppliers.

Owner mustn't share plans, technical details, and other vital and sensitive information to the unauthorized people / organization without approval and knowledge of the consultancy.



Contact us....

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