



Project Estimate

Turmeric / Ginger

Soilless, Smart agriculture.

Protected farming (Polyhouse, NVPH)

PROJECT EXECUTION STEPS



CLIENT MEETING

When a client contact gronatura, and further decided to move forward, we schedule a meeting with them at their place / field. The meeting facilitates both of us to understand each other. Further it makes us to understand the needs of the client and their farmland, topology market etc....very well. Based on the data collected, we suggest the best model and crops.



TECHNICAL VISIT

After the client meeting, the technical team's visit is very pivotal. This documents an existing basic facility and further needs to be implemented. This visit records all the details of the existing and future implementations. This eases the work to prepare the accurate techno economic feasibility report and an estimate. The same will be shared with the client.



PROJECT MATERIAL DELIVERY

Soon, The TEFR / Estimate reviewed and approved by the client, Memorandum of Understanding (MoU) is executed. After the receipt of the payment according to the MoU The material delivery takes place.

(The MoU comprises, Complete deliverables, Schedule, Plans, estimate, cropping info. and other terms and conditions).



PROJECT WORK COMMENCEMENT

Before project materials reach the project site, the team of skilled labours arrive and start all the necessary preparation works.

The complete project setup will take anyhow 45-60 days. The detailed project schedule will be shared in advance with the client and work will be executed accordingly.



TESTING, COMMISSIONING AND TRAINING

Once all the setup works completed, the through testing and commissioning of Smart agriculture system will be done.

The offsite field trails and training will be provided with all required technical materials and technology.

Consultancy services will be provided at least for a crop cycle with both offsite visits and online by our agronomists.

INVESTMENT Break-up (CAPEX), Without subsidy

Sl.#	Item	UoM	Qty x Rate	Amount
1	NVPH with Air circulation fans 48mx84m=4,032Sqm, (Gutter height 5m / 5.5m)	Sqm.	4,032 x 950.00	3,830,400.00
2	Seeds / Tissue culture saplings 27,000 Ea. (1,620Kgs / 27K TC Seedlings) Rajendra Sonali / Sonia , IISR-Prathibha, Rio-De-Janeiro , Himachal, IISR-Vajra, Varada			200,000.00
3	HDPE / LDPE 200Micron / 120Micron/400GSM Open-top Square. growbag 0.45m x 0.45m x 0.45m = 91Ltrs (24.07 Gallons)	Kgs	11,700 x 60.00	705,000.00
3A	Supporting rack structure (FRP) to growbags for drain off / prevention of soilborne infections	L/S		300,000.00
4	Cocopeat: 0.45m x 0.45m x 0.30m = 65Ltrs 780 Cum (780,000 Ltrs / 52,000Kgs (52 Tonnes) Current Mkt, price Rs. 30,000/Ton. (All inclusive)	Tonne	52x30,000	1,560,000.00
5	Fertilizer and IPM products (Organic / inorganic fertilizers and IPM products)	L/S		600,000.00
6	Irrigation system (Automatic filtering system, Pipes, Foggers, Valves, Pumps, Tanks, and other accessories)	L/S		800,000.00
6A	50,000 Ltrs , zinc-aluminum water storage tank	Ltrs.	50,000 x 8.00	400,000.00
7	Smart agriculture (LoRaWAN enabled IoT sensor based automated Climatic control, Irrigation control and Fertigation system)			800,000.00
8	Weed mat 110/100 GSM x 2.1m x 50m,	Sqm.	4,305 x 21.00	90,405.00
9	RO water plant 2,000 LPH System	L/S		350,000.00
10	Generator / Solar system (7.5 KW)	L/S		900,000.00
11	Pro-tray, Minor equipment, and accessories	L/S		200,000.00
12	Storeroom and Control room	L/S		700,000.00
13	Slicer and Packaging materials	L/S		500,000.00
14	Robot (Sprayer / transporter / UV Pest control)	L/S		350,000.00
Total Investment			12,285,805.00	

Investment (CAPEX), With subsidy				
Sl.#	Item	UoM	Quantity	Amount
Total Investment				12,285,805.00
1	NHB subsidy for polyhouse, 4000 Sqm.			2,300,000.00
2	PM Kusum yojana for Solar pump, 10HP			350,000.00
3	Packaging house			300,000.00
Backend subsidy grants total				2,950,000.00
Subsidized total investment				9,335,805.00
Consultancy charges @5% with GST 18%				550,812.00
Subsidized total investment				9,886,617.00

ECONOMICS (POWDER)

Operating Expenditure (OPEX)		
Sl#	Description	Amount
01	Seedlings / Seed, fertilizers and IPM products	900,000.00
02	Packaging charges and processing	500,000.00
03	Utility	100,000.00
04	Labour charges	600,000.00
Total		2,100,000.00

Cropping			
Plant density		11,640 grow bags	
Yield			
Fresh yield 4.5-5.5Kgs (Per growbag 4.5 Kgs)		52,200 Kgs	
Dry yield (18% recovery from the fresh)		9,396 Kgs	
Yearly yield from 2 crop cycles		9,396 x 2 = 18,792 Kgs	
Gross income (Grounded powder)	18,792 Kgs	400.00	7,516,800.00
Operational Expenditure			2,100,000.00
Seedlings, Seed, fertilizers and IPM products	L/S	L/S	900,000.00
Packaging Material and Processing	L/S	L/S	500,000.00
Labour	L/S	L/S	600,000.00
Utility bill	L/S	L/S	100,000.00
Powder, Net Income / year			5,416,800.00

* Prices of the turmeric/ginger powder at farmgate is somehow ranges between **300.00-600.00** Rs/Kg, the variation is subjected to curcumin / gingerols & shogaols content, farming practices (Organic/inorganic) and packaging.

* Yield may vary as per the climatic conditions, practices and cares adopted, varietal selection etc....

RETURN ON INVESTMENT (ROI)		
Sl#	Description	Amount
Net Income		
01	1 st year income	5,416,800.00
02	2 nd year income	5,416,800.00
Total		10,833,600.00
Capital Investment		
01	Capex	9,886,617.00
Return on Investment + Profit, on 2nd year end.		946,982.00



Domestic Processing: Washing> Slicing >Solar tunnel drying >Pulverizing >Packing >Turmeric powder pack

ECONOMICS (SEED MATERIAL) / GINGER (FRESH)

Operating Expenditure (OPEX)		
Sl#	Description	Amount
01	Seedlings, Seed, fertilizers and IPM products	900,000.00
03	Utility	100,000.00
04	Labour charges	600,000.00
Total		1,600,000.00

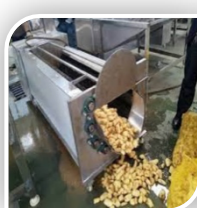
Cropping			
Plant density		11,640 grow bags	
Yield			
Fresh yield 4.5-5.5Kgs (Per growbag 4.5 Kgs)		52,200 Kgs	
Yearly yield from 2 crop cycles		52,200 x 2 = 104,400 Kgs	
Gross income (seed material (fresh rhizome))		104,400 Kgs	60.00
		6,264,000.00	
Operational Expenditure		1,600,000.00	
Seedlings, Seed, fertilizers and IPM products	L/S	L/S	900,000.00
Labour	L/S	L/S	600,000.00
Utility bill	L/S	L/S	100,000.00
Seed sales, Net Income / year		4,664,000.00	

* Prices of the turmeric/ginger seed at farmgate is somehow ranges between **40.00-150.00** Rs/Kg, the variation is subjected to farming method, curcumin / gingerol content, farming practices (Organic/inorganic) and packaging.

* Yield may vary as per the climatic conditions, practices and cares adopted, varietal selection etc....

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RETURN ON INVESTMENT (ROI)		
Sl#	Description	Amount
Net Income		
01	1 st year income	4,664,000.00
02	2 nd year income	4,664,000.00
03	3 rd year income	4,664,000.00
Total		13,992,000.00
Capital Investment		
01	Capex	9,886,617.00
Return on Investment + Profit, on 3rd year.		4,105,383.00



Domestic Processing: Washing> Slicing >Solar tunnel drying >Pulverizing >Packing >Turmeric powder pack

TURMERIC, CROP CYCLE

Year	Annual scheduling / activities											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
One												
Two												
Three												
Four												
Five												
Six												
Seven												
Eight												
Nine												
Ten												

	Transplanting of seedlings		Crop growing phase
	Replacement of substrate		Harvesting
	Nursery seedling		Sterilizing substrate

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

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Industrial Processing: Washing> Slicing > continuous band drying >Pulverizing > Vibratory Sieve

TERMS AND CONDITIONS

Items	Descriptions
Payment	As per the agreed terms of the project final meeting.
Delivery schedule	With in 07 days from the receipt of the first payment.
Completion schedule	60 days from the date of the first payment receipt.
Taxes	All-inclusive in the estimate
Freight	Paid to vendor / supplier at actuals.
Arbitration	Palakkad jurisdiction only
Bank Account details	GRONATURA CONSULTANCY Current A/C #: 250905000524 IFSC: ICIC0002509 BANK: ICICI BANK BRANCH: VICTORIA COLLEGE, PALAKKAD, KERALA, 678001.
<p>Client 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.</p> <p>Client must provide potable water, uninterrupted power supply during the project execution.</p> <p>Client 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.</p> <p>Client must provide and ensure safety and security of all the material at work site.</p> <p>Client must construct Control room and storage rooms for irrigation/fertigation system and fertilizers, other inputs, and accessories storage.</p> <p>Any damaged caused due to unscientific storage or ignorance by the Client / related people can't be entertained. The loss caused must be borne by the Client, if it doesn't fit the rule books of the manufacturers / suppliers.</p> <p>Client mustn't share plans, technical details, and other vital and sensitive information to the unauthorized people / organization without approval and knowledge of the consultancy.</p> <p>FYI: Gronatura reserves all the rights to use/implement new material / technology any time without prior information / approval of the clients.</p>	

A SERVICE GUARANTEE.

Gronatura consultancy, in general execute only turnkey projects. i.e., Build and Transfer basis.. As per the meetings and understanding with the client, this can be altered and gronatura can undertake partially / complete operations with marketing assistance to make sure that the client gets their investments back and profits as per our projections, at the earliest. Till the client receive their investments back (RoI) with the profits, the service of the gronatura will be available and continued.

The conditions applied are as following

- Client has to arrange agriculture graduate(s) and skilled manpower for the daily overall operations. The wages and perks for the same is the scope of the clients only.
- Gronatura, trains the people and transfer the technologies to the client's till they get expertise and execute the project independently or till the client receive their ROI / Break even.
- Client has to arrange transportation and accommodations to the gronatura people and others, if, the distance of the project location of the project is 5+ Kilometers from the tier 1/2/3 cities.





Contact us,



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