



KHOVA MAKING MACHINE

SECTOR: AGRI - ALLIED

MODEL BANKABLE DOCUMENT



TABLE OF CONTENT

1. Introduction.....	2
2. The need for solution.....	3
3. Criteria for Selection.....	4
4. Schematic Design	4
5. Technical specification of components.....	4
6. Key features.....	6
7. Installations	6
8. Maintenance.....	8
9. Safety.....	8
10. Troubleshooting.....	9
11. Cost & Economics	10
12. Case Study.....	11
13. Installation Photos.....	13

1. INTRODUCTION

* * * XbS {aZ' k bji' ujM{y' |y| Nj}t' xZVzbZ'y| Uy{MIXMk' k bji' X| Z' {n' |I at' bZl' b' Vnl' Xb'bnl' y' n_k bji' uxnX| V{bnl' S{aZ' Z' by{ZI VZ' n_k bXjZ' k M' M' X' M' |j{ZxMbnl' Sab' a' M' UZl' {Zk' uZxM| xZSb' M' Z' w' M' Z' Vhnjb' ` _M' b' b' Z' y' M' X' {xM' yunx{ M' X' M' Z' k' Zl' {M' X' j' M' n' _M' u' x' Z' V' M' bnl' _n' x' u' x' N| V{bnl' n_` ` x' M' Z' k' bji' AaZ' xZlZ' V{bnl' n_ y| Uy{MIXMk' k bji' M' f' Z' x' y' Z' j' t' M' Z' V{y' {aZ' Vnk' k' Z' x' M' b' j' b' {Z' x' Z' y' {n_k bji' uxnX| VZ' x' y' Z' y' u' Z' V' j' t' X| x' b' ` y| k' k' Z' x' AaZ' ab' a' M' X' |I ynj' X' k' bji' V' M' UZ' u' x' n' b' M' j' t' Vnl' f' Z' x' {Z' X' b' {n' X' M' Z' X' M' Z' x' M' |j' M' A' i' an' M' n' x' {aZ' u' x' Z' u' M' M' bnl' n_ O' M' j' M' M' X' S' t' b' {a' X' M' V' M' Z' y' S' An_ Z' Z' M' X' x' Z' j' M' Z' X' y' , Z' Z' {y' S' Z' {V' A' x' M' b' bnl' M' j' u' x' N| V{y' M' V' n' |I {n' x' n' f' Z' x' B' U' o' n' _M' j' X' N' b' t' u' x' N| V{y' Vnl' y| k' Z' X' b' {aZ' Vnl' |I {x' t' a' z' | Z' {n' j' M' n_ n' M' Z' w' M' Z' u' x' N| VZ' y' b' ` M' X' u' x' Z' y' Z' x' f' M' bnl' k' Z' {an' X' y' S' {aZ' k' M' | _M' | x' Z' M' X' {x' M' b' ` {aZ' y' u' x' N| V{y' b' y' Vnl' b' Z' X' {n' } M' , M' y' a' j' {an' ` a' V' x' Z' b' j' Z' y' {M' b' y' {b' M' j' X' M' M' X' Z' n' {M' V' M' j' Z' S' b' y' Z' y' {k' M' Z' X' {a' M' {aZ' f' M' j' Z' n_ O' an' M' M' X' V' a' M' M' U' M' j' Z' X' y' , Z' Z' {y' U' | y' b' Z' y' u' | {n' Z' {aZ' x' , n' |j' X' UZ' f' M' j' Z' X' k' n' x' {a' M' ? y' a' U' U' S' U' U' k' b' j' bnl' , ab' a' b' y' X' n' | U' j' Z' {aZ' f' M' j' Z' n_ k' bji' a' M' X' j' Z' X' U' t' {aZ' n' x' M' b' Z' X' X' M' b' t' y' Z' V{ n' x' a' }

ÜªÜ† | xZl' {x' M' b' Z' y' }

Oan' f' M' u' x' N| V{bnl' b' y' {aZ' Z' M' b' Z' y' { , M' n_ u' x' Z' y' Z' x' f' b' ` k' bji' u' x' N| VZ' X' b' x' | x' M' j' M' Z' M' y' a' n' x' i' an' f' M' u' x' N| V{bnl' S' ` Zl' Z' x' M' j' t' {x' M' b' bnl' M' j' k' Z' {an' X' j' Z' a' nuZl' u' M' Z' f' M' u' x' N| M' bnl' u' x' N| VZ' y' y' a' b' y' _n' j' n' , Z' X' b' ` , ab' a' k' bji' b' y' a' Z' M' Z' X' b' M' i' nuZl' u' M' n' f' Zl' ' l' n' l' y' k' n' i' t' b' z' M' X' Vnl' {b' | n' | y' t' S' y' {b' x' Z' X' M' X' y' x' M' Z' X' , b' a' {aZ' a' Z' j' u' n_ y' x' M' Z' x' {n' M' f' n' b' {aZ' y' Vnl' x' Vnl' ` n_ k' bji' y' n' j' b' y' y' {b' M' b' ` {n' {aZ' u' M' a' AaZ' k' bji' b' y' a' Z' M' Z' X' {b' j' b' M' {M' b' y' M' y' Z' k' b' y' n' j' b' k' M' y' Vnl' y' b' {Zl' Vt' n_ Xn' | ` a' a' AaZ' x' Z' M' {Z' X' S' {aZ' u' x' N| V{y' b' x' Z' k' n' f' Z' X' _x' n' k' {aZ' b' z' M' X' n' j' j' Z' X' | u' b' {n' M' y' n' j' b' k' M' y' i' l' n' , l' M' y' i' an' f' M' u' M' a' }

AaZ' {x' M' b' bnl' M' j' k' Z' {an' X' n_ i' an' f' M' k' M' b' ` x' Z' w' b' Z' y' j' M' Z' w' M' i' {b' t' n_ Zl' Z' x' t' M' X' b' {aZ' u' x' Z' y' Zl' VZ' X' M' S' Zl' Z' x' t' y' M' b' ` b' y' i' Z' Z' X' X' {n' u' M' k' n' x' Z' M' {Zl' {bnl' a' * | x' | x' M' j' X' b' M' Zl' Z' x' M' j' t' , n' n' X' M' X' V' M' {j' Z' X' | I ` S' Vnl' M' i' M' X' U' bn' , M' y' {Z' M' Z' | y' Z' X' b' nuZl' Va' | ja' M' y' _J' Z' j' _n' x' i' an' t' M' k' M' b' ` a' Oan' t' M' k' M' b' ` b' f' n' j' f' Z' y' b' {Zl' y' b' Z' a' Z' M' b' ` X| x' b' ` {aZ' X' Z' y' b' M' M' bnl' u' x' N| VZ' y' y' , b' a' M' i' M' k' n_ Z' f' M' u' x' N| M' b' ` {aZ' j' M' Z' w' M' i' {b' t' n_ Zl' Z' x' t' , M' Z' x' u' x' Z' y' Zl' {b' {aZ' k' bji' a' AaZ' {x' M' b' bnl' M' j' k' Z' {an' X' n_ i' an' t' M' k' M' b' ` a' M' y' M' | k' UZ' x' n_ X' M' U' M' i' y' a' @n' k' Z' n_ {aZ' k' M' i' x' X' M' U' M' i' y' M' Z' ©

- A' k' Z' M' X' j' M' u' x' Vnl' y| k' b' ` ` `
- 1' M' Z' f' M' u' x' N| M' b' w' M' j' t' `
- < n' n' x' i' Z' Z' u' b' ` w' M' j' t' `
- @k' M' j' y' M' j' Z' u' x' N| V{bnl' `
- @k' n' i' t' y' k' Z' j' j' `

ž b' Z' x' Zl' { {tunjn' b' Z' y' n_ i' an' f' M' U' | y' b' Z' y' }

- Üª " | {x' Z' u' x' Zl' Zl' x' k' n' X' Z' j' `
- Ýª ž M' b' t' _M' k' k' n' X' Z' j' `
- Þª @k' M' j' i' an' f' M' k' M' b' ` | l' b' `
- ßª @ Z' Z' {k' M' b' ` k' n' X' Z' j' `

Üª * X' b' f' X' M' j' Zl' {x' Z' u' x' Zl' Zl' x' y' © * {a' b' y' {t' u' Z' S' | y' Z' x' Vnl' j' j' Z' V' y' k' bji' _x' n' k' ' l' Z' M' U' t' X' N' b' t' _M' k' Z' x' y' M' i' X' u' x' N| VZ' y' y' Z' y' b' ` x' M' Z' n_ a' U' 1' {n' Y' U' U' 1' a' AaZ' t' | y' Z' X' {x' M' b' bnl' M' j' k' Z' {an' X' y' Va' | ja' M' i' n' k' M' i' Z' y' {aZ' i' an' f' M' i' S' l' Z' n' x' { , n_ M' k' b' j' t' k' Z' k' UZ' x' y' M' Z' b' f' n' j' f' Z' X' b' {a' b' y' u' x' N| VZ' y' y' a' H' Z' a' M' f' Z' n' U' y' Z' x' f' Z' X' b' Z' x' Zl' { u' x' M' b' Z' y' M' X' n' u' {Z' X' U' t' | y' Z' x' y' b' X' b' Z' x' Zl' {M' Z' M' y' M' y' UZ' j' n' , a' }

- Üª 2 MIZ' b' ÝÜ1' i NkãMö jH abZ' i anfmA©ByZxy' k MIZy' Mi anfmB' yk Nj' ÝÜ1' yb% i NkãMö {aZt' un| x' à1' k bji' M' {tk' Z' M' X' y' ZZx' b' ' Vnl {b | Zy' ÝÜk' b' a' AaZ' i anfm {Z. { | xZ' , bji' UZ' , abZ' ' xM | jZy' a' AaZt' xZuZM' {aby' uxnVZyy' M' X' , nxi' _nx' áax' Aaby' {tuZ'n_ i anfm {aZt' yZjj' M' ? y' YaÜµ' ' a' .
- Ýª 2 MIZ' b' ÜÜÜ' ÜaÜ1' i NkãMö jUxn, I' i anfmA©ByZy' k MIZy' Mi nfmB' ' Ub' yb% ÜÜÜ' ÜaÜ1' i NkãMö AaZt' un| x' Nj' àÜ' àÜ1' k bji' M' M' {tk' Z' M' X' y' ZZx' b' ' Vnl {b | Zy' {bji' k bji' ' Z' {b' ' b' {n' i anfm _nxk' a' AaZt' | yZX' _bxZ, nnX' nx' Vnxl' ' Ubn¹, Nj' {Z' {n' _ZZX' b' {n' Va | jaM'
- Pª 2 MIZ' b' àÜÜ1' ' jM' UMYZ' xn | I' X' i NkãMö Aaby' uxW' (bZ' k M' j' t' NkãM' {ZX' b' ' M' i aM' XXIS' E' M' Nj' n' {Z' Xb' {x' b' | yZxy' a' AaZt' un| x' k bji' M' {tk' Z' ÜÜÜ' ÝÜÜ1' b' {n' Ub' i NkãMö M' X' y' {M' { y' ZZx' b' ' nl' VZ' k bji' ' Z' {abM' a' AaZt' | yZ' y' | NkãM' Z' Ubn¹, Nj' {Z' {n' _ZZX' b' {n' Va | jaM'



Ýª ž Nkãt' _Mk Zxy' a' AaZ' _Mk Zxy' , an' aMfZ' XNkãt' _Mk ' n_ Vn, ' M' X' U | _Nj' {aZt' unxVZyy' {aM' àÜ' ÜÜÜ' k bji' ' Ut' n, I' M' X' k MIZ' i anfm AaZt' | yZX' M' t' nl' Z' n_ {aZ' M' Wn' fZ' k Z' {anXy' k ZI' {bnl' ZX' b' ' {aZ' b' Xb' {x' | Mj' ZI' {xZuxZI' Z | xy' k nXZj' a' " b' aZx' nl' Z' _Mk' b' t' k Zk' UZx' b' f' nj' fZ' X' nx' XNkãt' j' M' Wnx' | yZX' {n' {aby' , nxi' a' .

Pª @ Nj' i anfm k M' B' ' | I' b' y' a' Aaby' yk Nj' i anfm k M' B' ' | I' b' y' uxnVZyy' ÜÜÜÜ1' ÝÜÜÜ1' k bji' ' M' X' uxnX' | VZ' ÜÜÜ' B' ÜÜÜ' ' i anfm Aaby' i b' X' n_ | I' b' y' x | I' y' Ut' ZI' {xZuxZI' Z | x' , aZx' k bji' ' by' M' f' M' Wj' Z' a' Aaby' | I' b' Vnl' yb' {y' n_ P' à' {xM' b' bnl' Mj' Va | jaM' M' X' abZ' X' M' P' à' j' M' Wnx' Zxy' _nx' uxnVZyy' k bji' a' AaZt' ' Z' {k bji' ' _nxk' ' Xb' _ZxZI' {XNkãt' _Mk Zxy' {bji' k nxl' b' ' à' P' ÜMk' ' M' X' {aZI' y' {M' { {aZ' , nxi' a' AaZt' | yZX' _bxZ, nnX' µUbn, Nj' {Z' µMj' aZ, I' | {yaZjj' _nx' U | xl' b' ' a' .

Bª <ZXaMjy, ZZ' {k M' B' ' ©' I' {xZuxZI' Z | xk MIZy' y, ZZ' {n' {n_ {aZ' k bji' S' {aZt' un| x' MÜÜ' ÝÜÜ1' k bji' ' b' i aNkãM' M' X' NkãX' y' ' M' b' {n' b' M' X' k MIZ' uZXM' M' X' yZjj' b' ' j' n' Vj' k M' i Z' {y' a' .

2 M' i Z' {b' ' ©' AaZ' i anfm M' Z' uW' i ZX' b' {n' à' ÜÜÜ' ' b' ' ujM' {by' M' X' Z' b' aZx' {M' ZI' ' {n' {aZ' k bXjZ' k ZI' ' nx' ' XbZV' {j' t' yZI' X' {n' y, ZZ' {k MIZy' j' b' Z' AaM' | x' <ZXaMj' S' E' b' 2 byaxM' Ut' U | y' a' <Mk ZI' {y' k Nkã' nl' VZ' M, ZZI' a' .

2.NEED FOR SOLUTION

- ° y' uZx' {xM' b' bnl' Mj' uxW' (bZS' i anfm k M' B' ' uxnVZyy' by' Xx' X' Zxn | yS' Vnl' ybZx' b' ' {aM' k Nö' Nö' b' ' {aZ' {Z. { | xZ' M' X' w' Mj' t' n_ {aZ' i anfm by' Xb' b' | j' , aZx' b' {Zx' fZI' {bnl' ' n_ M' k' Wab' Z' VMI' Vn | I' Zx' {aby' by' | Z' a' .
- An' VMZx' {n' {aby' b' VxZMj' b' ' k M' i Z' {XZk' M' X' _nx' i anfm S' xZj' t' b' ' nl' ' | I' y' {Mj' Z' j' M' Wnx' y' | uujt' by' Xb' b' | j' a' ByM' Z' n_ k' Wab' Z' k' MIZy' ZI' {xZuxZI' Z | x' b' XZuZI' XZI' {n_ y' | Va' by' | Zy' a' .

5"	OO U"	522"Y r. '30 "	4"
6"	Ej cti g'eqpwtqngt"/'Rj qequ'EON'Uqrf "	52"C.'46"X"	3"
7"	Ecdrgu'tgf - drçeni*O/O +"	6"us "o o "	4"o "z"4"
8"	Ecdrgu'tgf - drçeni*O/D+"	32"us "o o "	37"o "z"4"
9"	Ecdrgu'tgf - drçeni*D/D+"	38"us "o o "	4"o "z"4"
:	Ecdrgu'tgf - drçeni*D/N+"	32"us "o o "	: "o "z"4"
;	CID'y kj "URF "('OED"	4"R. '3"QWV"	3"
32"	Getj kpi "Ecdrg"	32" us 0 o 0'	32"o "
33"	Getj kpi "Mkv"	"	3"
34"	F qwdrg'r qrg'OED"*Nqcf "ukf g+y kj "dqz"	54"C"	3"
35"	CE"vq'FE"eqpxgtgt"	42"C.'46"X"	3"
36"	Ej cpi g'qxgt"uy kej "	54"C"	3"
37"	FE'NGF "Nki j v"	7"Y. '46"X"	3"
38"	Eqpuwo cdrgu"	"	3"

UA ÜÜÜ1'Ulm¹, Mj{Z'k nXZj', kãa'Ujn, Zx'

UfPq"	Nqcf 'V{rg"	Y cwei g"	Pqu"	J qwtu"
3"	Mj qxc'b cmlpi 'b cej kpg"	4; 2'Y "	3"	6"
4"	Dmy gt'"	52'Y "	3"	6"
5"	FE'NGF 'Nki j v'	7'Y "	3"	5"

UfPq0'	Rt qf wevu'	Ecr cels{ "	S v{ "
3"	Uqmt'O qf wrg"*94'Egmu+""	522"Y r. '46"X"	4"
4"	Uqmt'Dewgt { "	422"Cj. '34"X"	4"
5"	OO U"	522"Y r. '30 "	4"
6"	Rj qequ'EON'Uqrf "Ej cti g'Eqpwtqngt"	52"C.'46"X"	3"
7"	Ecdrgu'tgf - drçeni*O/O +"	40"us "o o "	6"o "z"4"
8"	Ecdrgu'tgf - drçeni*O/D+"	32"us "o o "	37"o "z"4"
9"	Ecdrgu'tgf - drçeni*D/D+"	38"us "o o "	4"o "z"4"
:	Ecdrgu'tgf - drçeni*D/N+"	8"us "o o "	: "o "z"4"
;	Ecdrgu'tgf - drçeni*D/N+"	40"us "o o "	: "o "z"4"
32"	Getj kpi "Ecdrg"*Nqcf "ukf g+"	32" us 0 o 0'	32"o "
33"	Getj kpi "Mkv"*Nqcf "ukf g+"	"	3"
34"	F qwdrg'r qrg'OED"*Nqcf "ukf g+y kj "dqz"	38"C"	3"
35"	Vy q'y c{ "uy kej "y kj "dqz"	32"C"	3"
36"	FE'NGF 'Nki j v'	7"Y. '46"X"	3"
37"	Eqpuwo cdrgu"	"	3"

c) ÜäÜ1'Ulm¹, Mj{Z'k nXZj', kãa'Ujn, Zx

UfPq"	Nqcf 'V{rg"	Y cwei g"	Pqu"	J qwtu"
3"	Mj cy c'O cmlpi 'b cej kpg/207'j r "	6; 2'Y "	3"	6"
4"	Dmy gt ' /'72'Y "	72'Y "	3"	6"

UfPq0'	Rt qf wevu'	Ecr cels{ "	S v{ "
--------	-------------	-------------	--------

The type of footing will depend on the type and angle of roof for rooftop mounting. In case of ground mounting, it depends on the type of soil.

Isolated footings are most commonly used footings for Reinforced cement concrete column because it is simple and most economical.

Combined footing: the aim is to get uniform pressure distribution under the footing.

Earthing of panels: in order to protect the entire solar system and people using it has to be connected to earth.

Panels are interconnected such that the voltage of the system is achieved. They are connected to the Array Junction Box by MC4 Connectors. Panels are interconnected such that the voltage of the system is achieved.

7.3. Charge controllers:

- Fuse has to be removed prior to installation.
- First connect positive and negative terminal of the battery to the charge controller.
- Then connect the positive and negative terminal of the load to the charge controller.
- Then fuse has to be reinstalled.
- Finally connect the positive & negative terminal of the panels to the charge controller.

7.4. Batteries:

- For ventilation holes are made in the rack to give space for air to pass through.
- Batteries should not stacked one above the other.
- Keep polarities of all the batteries adjacent to each other on the same side.
- Batteries should be stored in a cool, dry and shaded area free from sunlight.
- Best room temperature for storing batteries is 20°C.
- In DC systems, while making connections, always connect negative wire first and then positive wire.
- While disconnecting, disconnect positive wire first and then negative wire. This is for safety reasons and to avoid sparks at the battery terminals while doing connections
- Keep air safety distance between batteries of at least 20mm.
- Use wire lugs at battery terminals to avoid loose connections.
- Do not use grease on battery lugs as it has a high melting point and is a bad conductor of electricity. Use petroleum gel instead.
- Lugs should be dry and should not be hot. Lugs get hot due to loose connections, improper wire size or poor quality of lugs
- Always keep top of batteries clean and keep the lids sealed to avoid contamination by dust.
- To measure battery voltage, first disconnect electric load and solar input
- To get more accurate current readings, connect ammeter in series to the battery and load.
- Battery Connections: Do the battery interconnections such that the system voltage is achieved. Keep them well in the battery box.

8. MAINTENANCE

8.1. Khova Making Machine

- Clean the machine after use.
- Check quality scrapper once in two months

8.2. Module:

Clean the panels at least once a month.

Do not displace the panels from the mounting structure.

Tilt angle has to be checked.

Check if there is any deformation in the panels.

Check if there are any wire/ wires directly exposed to sunlight.

Do not drop, allow objects to fall on, stand or step on solar modules.

Do not walk, lean, sit or rest heavy objects on solar panels.

Prevent the direct contact of the positive and negative terminals of Panels.

Solar modules have a protective glass front. Broken solar module glass is an electrical safety hazard (electric shock and fire). These modules cannot be repaired and must be replaced.

8.3. Charge controllers:

Care has to be taken to frequently check the indicators to ensure proper functioning of the system

Do not place any metallic or fire prone object close to the charge regulator. A minimum of 12" space should be maintained all around for free air circulation.

8.4. Battery:

- Check the acid level in the battery at regular intervals. Fill with distilled water if the acid level is low.
- Do not overuse the system.
- Apply Petroleum Gel on both terminals of the battery.
- Prevent the direct contact of the positive and negative terminals of batteries.
- Batteries store a large amount of energy. Never short circuit the external contacts of battery under any circumstances

9. SAFETY

9.1. Khova Milking Machine

- Always reduce the flame of gas/fire before pouring in the milk and pouring out khova.

9.2. Module:

- If wiring line voltage is higher than 70 Volts it will be Hazardous.
Wear insulated safety gloves, industrial shoes while working on the system
Do not touch the panels junction box during day time, as DC voltage is always present when solar panels are exposed to sunlight
MCB has to be turned off in solar combiner box of the Solar Array before you work on them.
Always check positive or negative polarity of any wire with multimeter before connecting it to any device
Do not leave any wire open, it can touch other terminals causing short-circuit.

9.3. Charge controllers:

- Do not allow water to drip or splash on the charge regulator.
- Avoid children touching the charge controller.
- Keep the machine and other parts clean and free from dust & water.

9.4. Battery:

Provide a ventilation in the battery room for the hydrogen gasses generated to move out.

- Do not allow water to drip or splash on the battery.
- Avoid children touching the charge controller.
- No Smoking warning sign has to be hanged if needed outside.

Wear safety glasses for protecting the eyes from the acid.

If acid comes in contact with eyes, wash for 15 minutes and report to a doctor immediately

If acid comes in contact with skin or clothing, rinse off for several minutes and try not to spread the electrolyte. Report to a medic/doctor after rinsing

10. TROUBLESHOOTING

10.1. Module :

Disconnect the fuse

Cover solar modules with thick blanket or cardboard

Check the interconnection polarity between the modules

Check the bypass and reverse blocking diodes for correct polarity

Check for any loose connection

Replace the fuse.

Uncover the solar modules

Check the output voltage of individual modules using clamp meter /Multimeter

Check the output voltage of solar array at terminal blocks.

10.2. Charge controllers:

Check for Fuse if the wire inside the fuse is shot, replace with new fuse.

Check for series charging, if not then there might be complaint with the circuit.

Check for panel, battery and load voltage

10.3. Battery:

Check specific gravity of the battery if the specific gravity is low then send it

- Check the terminal voltage after the load is disconnected from the battery terminal.
- Remove corrosion on the terminal posts
- Use self-leveling filler that automatically fills the battery to a predetermined level.
- While topping take care not to splash from the cell opening

11. COST & ECONOMICS

Methodology: The cost economics based on the service demand translating to profits per month which is required to service the EMI cost of acquisition of the system.

° y| k u{bnl y©

MA@ty{Zk Vny{ by?y ÜaÜÜÜÜµ¹ jð Vj n_ynjM^Vnk unl ZI {A² M^ b k nl Zt?y PÜÜÜÜ M X jnM¹ M n|I {?y ÜPÜÜÜÜ¹

UÄAaZ {n{M¹ Vny{ {n ZI X | yZx by?y ÜPÜÜÜÜµ¹, ßa uMk ZI {ZI | xZ n_ßY k nl {ay M X b {ZxZy{ xM Z n_ÜYö aAaZ " 2 *by Vnk b {n?y PÄÜáµ¹

Approximate revenue during the month

µM² MZxMj¹	† n,² bj¹
Per Unit Price	₹ 28.00
Batch Quantity (L)	30
Total Cost Of 1 Batch	₹ 890.00
Cost Of 3 Batches	₹ 2,670.00
Khava Price per unit	₹ 200.00
Khava Prod. Per Batch (kg)	5.454545455
Prod. Per Day (Kg)	16.36363636
Per Day Khova revenue	₹ 3,272.73
Monthly Income	₹ 81,818.18
Monthly Income	₹ 8,818.18

Additional expenses during the month "

µµ² nl {ajt " .uZl yZy©	µµ
Labour Charge	3750
Firewood/gas	2500
Gas	0
Total Expense	6250

" 2 *† NjM jM bnl "	
Loan Amount (Rs.)	130,000
Interest (% p.a.)	12%
Time Period (Years)	3.5
EMI (Rs.)	(3806)

Expected Increase in Profit after Intervention"

S no "	Particulars "	Amount/mo nth "
1 "	Savings from cutting down labour expenses "	3750 "
2 "	Expected increase in productivity (20%) "	600 "
3 "	Expected increase in expense (20% input cost) "	525 "
4 "	Total expected increase in profit (1+2-3) "	3825 "
5 "	Expected loan repayment "	3806 "
6 "	Maintenance cost "	000 "
7 "	Existing profit "	8818 "
8. "	Profit after intervention (4+7-5-6) "	8837 "

The intervention is expected to increase the entrepreneurs income by Rs 8837 on an average post payment of EMI.

12. CASE STUDY

GbMy) Mli ZS_xnk @njM| xXby(xb{ n_2 NaMMya(xMbyMi b XbYX| Nj
 Zl {xZuxZl Z| x^*{-yMank Z'UMYZX|| l q'MIX'aZ'byi anfvMk Mib` U| yb Zyy_xnk ni Z'MIX'aMl
 †ZM^<MIXaMtu x'by, Zjjil n, l ub' xk MZ{n, l S{aZz'byMjn{ n_XZk MIX_nx<xMjNk'Zk ujZ
 y, ZZ{A^° jj'y, ZZ{yanuyk MIZi anfvMIX'uZXaMj'uxMjNk'n'yZjja^

) Z'aMj'UZZl Un|` a{k Wab Z_xnk OnjaM| x{n'y(M{i anfvMk Mib` |l q', ab'a
 k Wab Z'aMj'UaU1'fZyyZj'vMjMq† MIX'by'M_bZ, nnX'nuZxMZX'k nXZja^ Z'y(M{ZX'aby, nxi U| {
 X| x'b`, nxi b` {tk Z'UZVM|yZ'n_un, ZxV| {byy| ZSaZ'Un|` a{z ('yZ'yMjyn^a) Z'k MZy'BUO`
 i anfvMjM'MIX'XZjb'Zxy{n'y, ZZ{yanuyb`<MIXaMtu|x'ni {aZ'yMk Z'XM^a) Z'vhjjZV'yk bi_xnk
 l ZMUT'XNkt`_Mk Zxy^a^

