

## **Greenhouse/polyhouse:**

Greenhouse emaw polyhouse emaw han tih hian thlaichinna atana in sak, a chung leh a bang vel chu polythene a khuh vek tihna a ni. A zangkhai a, enkawl a awlsam a, rial leh ruah lakah a him a, a man a to lo bawk a ni. Greenhouse a thlai chin hi a thar hlawk a, sik leh sa danglam that that-in thlai chin laia khawi chhe lutuk lo bawk a ni. Japan ramah chuan chawhmeh thlai chin nan an polyhouse zawng zawng 84% vel hi an hmang a ni.

A hmun thlan dawna hriattur pawimawhte:

- A hmun thlan dawnin Industry lian awmna bul thlan loh tur, Industry bulah chuan boruak bawlhlawhin thlai chin a ti khawlo thei a ni.
- In chhawng sang leh thingkungin a hliah theihna hmun a ni tur a nilo
- Tlem a awi tlan deuh, greenhouse chhunga tui lut lova, luan ral theihna a ni tur ni.
- Kawng pawh tha tak, engtik lai pawha bungrua thiar luh leh thiar chhuah theihna hmun a ni tur a ni.
- Thlai thar chhuah te hralh zung zung theihna tur bazar lian awmna bul hnai a tha a, amaherawhchu thlai kui tiahna ringawt anih chuan hla deuh pawh a pawilo
- Tui awm thatna hmun a ni ngei tur a ni
- Khawchhak-khawthlang hawi zawng ramah thlasik laiin nisa a hmu tha a, hmarlam atanga thli tleh lakah a him bawk a ni.

Greenhouse thatna te:

- Khaw chhe tak hnuai emaw nisa rum rut hnuaih pawh thlai that akin a chin theih
- Thlai thenkhat chu kumtluanin a chin theih bawk a
- Ram danga hralh tlak(export quality) khawp a thani, thlai in ang tha tak a thar chhuah theih a ni
- A thar chhuah a tam bawk ani.
- Thlai kui tiah nan duhthusam a ni bawk
- Thlai ral, rannung leh natna lakah ven a awlsam bik bawk
- Ram nei zau vaklo tan thil tih chi tak a ni
- Organic farming pawh a awlsam zawk hle

## **A sak dan(Structure):**

Greenhouse chu a len dan tur a zirte, sik leh sa a zirte, a sakna hmanrua a zirte, senso tur/theih zat a zirte, a lan dan mawi tih dan a zirte a a pian leh a style chu sak mai tur a ni. A tawi zawngin mahni mil tura sak mai tur a ni.

**Hmanrua mamawhte:**

Thing, mau, GI pipe, angle iron leh aluminium-te hi greenhouse ruhrek sak nana hman tlangpui a ni. Hmanraw hman a zirin a tlo leh tlo loh chu a innghat thui hle. UV film 150-200micron hi a chung khuh nana hman ber ani a, hetiang hi kum 4-5 vel a hman theih a ni.

### **Greenhouse chi hrangte:**

Kumtluana greenhouse hman tangkai a nih theih nan boruak, eng, khawlum lam leh boruak hnawn lamte tihdang lamna hman thin a ni. Hetianga tihdanglam dan a zirhian greenhouse hi a man hniam(low-cost), a laihawl(medium-cost) leh a man to(high-cost or hi-tech) tithe a then hran a ni.

### **Thlai chin tur thlan:**

Greenhouse hi thlai a hun lo laia chinna atana hman hian a tangkai ber. Thlai chin tur thlan chungchangah chuan greenhouse len dan a zirte, a hrall theih dan tur a zirte leh a man kan beisei dan a zirin a danglam thei a. Medium leh high-cost greenhouse ah te chuan kumtluanin thlai a chin theih a, a man tlawn chiah erawh chuan fimkhur a ngai deuh. Kan ram angah chuan capsicum, tomato, fanghma, leh thlasik thlai lampang chite chin a fuh viau.

### **Greenhouse chhunga thlai kui tiah:**

Greenhouse nilo, hmun pawnlang ang chi a thlai kui tiah chu a tiak rual lovin a chi a hek a, nisa lutuk a tuar theilo bakah hlawhchham a awl hle bawk a ni. Greenhouse ah chuan duh zat ang chiah kha a kui tiah mai theih a, a thi a tlem bik bak a, a to rual(uniform) bawk ani. Tomato, bawkbawn leh hmarcha chi kuitiah nante a tha hle a ni. Fanghma leh mai te pawh hi greenhouse hnuasia kui tiah hmasak chuan February thla velah a phun sawn theih der a ni.

A enkawl dan:

- Hriat reng tur pakhat chu greenhouse chhunga thlai chinte hian greenhouse lova an chaw mamawh ang tho an mamawh ani.
- Organic manure hi a theih chin chinah hman nasat tur a ni.
- Hnim a to tlem deuh bik thin a, a to chhun chu thlawh fai zung zung tur ani.
- A zam chi emaw, a thang sang chi emaw a nih chuan, uluk taka hlawi emaw tan(pruning) tih thin tur a ni
- Tomato leh fanghm etc ah te chuan a tang leh a hnah zuah tlem a, a kung phun tam zawk hi a hlawk zawk ani
- Greenhouse chhunga hmun awl tur chu hman tangkai hram hram tum tur a ni.
- Rannung leh ei chhetu dang chu a tirte, a lo lan veleh tihrem vat tur a ni.
- Greenhouse chu kum 2-3 kan hman hnu chuan a lei chu sarang fim a thla khat vel chhung khuh a tha a ni
- Thlasik laiin lei khuh hnawn(mulching) hian lei a tilum a, a tangkai hle a

- Tomato bikah chuan PCPA (Parachloro phenoxy acid(20ppm) a kahin greenhouse chhungah a thar hlawk duh hle

### Rough estimate for low-cost greenhouse

#### **GREENHOUSE FARMING/PROTECTED CULTIVATION**

1 Unit	—	1000 sq.m
Crops	—	Vegetables/Flowers
Model vegetable	—	Tomato

<b>Sl.No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (Rs.)</b>	<b>Amount (Rs.)</b>
	<b>Capital cost (A)</b>				
i)	U.V. film for roof	sqm	1200	42	50400.00
ii)	Shade net for side wall	sqm	700	40	28000.00
iii)	Materials like local timbers and bamboo for structure	L.S	LS	LS	15000.00
iv)	Nails, strings etc	L.S	LS	LS	1000.00
	<b>Total of 'A'</b>				<b>94400.00</b>
	<b>Variable (recurring) cost (B)</b>				
i)	Work charge for construction	MD	30	150	4500.00
ii)	Land development of preparation of beds	MD	20	120	2400.00
iii)	Manures	tins	500	15	7500.00
v)	Operational cost	MD	40	150	6000.00
vi)	Transportation cost of inputs	LS	LS		7500.00
vii)	Overhead charge including office expenses, survey & investigation, monitoring, evaluation etc @ of 10%				2790.00
	<b>Total of 'B'</b>				<b>30690.00</b>
	<b>Total of 'A' &amp; 'B' = cultivation cost</b>				<b>125090.00</b>