

# GOVERNMENT OF MEGHALAYA

**A.H. & VETERINARY DEPARTMENT**



**KA RUKOM RI SYIAR**

## KI JINGKDEW

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## KA MAT LAMPHRANG

Ka dohsyiar bad pylleng ki don ia ka protein, minerals bad vitamins bad long kibateiia kakoit ka khiah. Ki don myntakita ki jaitsyarkiba heh basankloi. Ka jingriia ki syiar kha pylleng ne Layer ka deikaweinaki ladkabakyntiewia kaioh ka kotjong ki nongrijingri. Ka sbohsyarkadeikababha ban pyndonkamiakakum ka sbohhabathungjhur ne kino kino ki jingthung.

Ka ri India ka la kiewbha ha ka jingpynmihpyllenghakine ki snem. Ka la lahruh ban pynmihia ki symbaisyiarbabha, ki tiar ki tar bad dawaidashin. Ka rukom ban ri ban sumar ka la nangkhambha bad namar kata, ka jingiap bad ki jingpangjong ki syiarka la dunashibun. Shibun ki ingsorkarmynta ki ai jinghikaiiakibathmu ban sdangia kakamrijingri. Ka jingdonjong ki syiar kha pylleng (improved breed) ka la kiewna ka 35 million ha ka snem 1961 sha ka 115 million ha ka snem 1996 bad ka pylleng ka kiewna ka 2,340 million sha ka 34380 million. Ka jingbhahpyllengiakabamynta ka long 41 tyllia u wei/kaweibriew, katbakatkum ka bhahjong ka ICMR, ka jingbhah ka long 182 tylli ki pylleng n aka byntauwei/kaweibriew ha ka shisnem ka long kabadonkamshibun eh ban kynthup lang ha ka bam kaba man la ka sngi. Ka national policy ka la shim ba ka jingriia ki syiar kha pylleng ka don ki lad ki lynti ban nangpynkiewshuhshuh.

Ka jingrisyiar ha jylla Meghalaya ka nangkiewnangkiewlyngba ka jingtreijongki: -

- Nongrep/nongrisyiar
- Ki riewshimet
- Entrepreneurs
- SHG bad Co-operative Society.

## KI JAIT SYIAR NE SYMBAI SYIAR BA IAHAAP HA MEGHALAYA

- **Layer ne Syiar kha pylleng:**-Kine ki jaitsyiarkideinakabynta ban pynkhapsylleng. Ki symbaisyiar layer baiahaphakane ka jyllajongngi ki dei – BV-380 (ba kha pyllengrong brown) bad ki long rongshoklet, INDRO, BV-300 (ba kha pyllengronglieh).
- **'Iarbamdoh ne broiler:**- Ki symbaibaiahap ha jyllalongngi ki long Vencobb-400, Colour broiler.
- **Dual Purpose/Low Input:**-Kine ki jaitsyiarlah ban ri n aka bynta ka doh bad ka pylleng. Kine ki kynthupia ki Kuroiler, Giriraja, Rainbow Rooster bad ki syiarkhasi.

### LAYER

- i. **BV Strains:**-Kine ki kynthupia BV-380 bad BV-300. Ka jingkhiajong ka syiarkynthei ka long kumne-

- 21 taiew ka jingkhia ka long 1.5.kg
- 72 taiew ka jingkhia ka long 1.85 kg
- ka jingkhapylleng ka long 272 tylli ha ka shisnem.
- Ka jing ai jakahapohsem ka long 3 sq.ftiakawei ka syiar.



- ii. **INDRO Brown Layers:**-Kine ki kha kumba 200 – 300 tyllikibarong brown ha ka shisnem. Ia ki syiarshynranglah ban rinakabynta ka doh. Kine ki jaitsyiarlah ban rihapohsem ne ripyllaitia ki.



- 'IarBamdoh ne Broiler:**-Vencobb – 400, ki dei ki symbai 'iarbroiler.Hapdeng ka 52 – 56 sngi ki lahihi aka jingkhia kaba 2 haduh 2.5 kg. Ki bam kumba 5 haduh 6 kg naduhba dang rithaduh ban da die.



### DUAL PURPOSE

- I. **Kuroiler:**-Iakinelah ban rina ka bynta ka doh bad ka pylleng. Kine ki jaitsyiar ki bam naphang, lah ban ai da ki jingbamba tam naingshetja. Ki kha kumba 150 tylli ki pylleng ha ka shisnem. U syiarshynrang u khiakumba 3.5 kg katba ka syiarkynthei ka khiakumba 2.5 kg.



- II. **Rainbow Rooster**:-Kineruhlah ban rina ka bynta ka pylleng bad ka doh. Kine ki jaitsyiar ki long kiba heh basankloi. Ki kha pyllengham bun bad ka met jongki ka lah ban ialehpyrshahia kino kino ki jongpang.

## KA RUKOM BAN RI

### A. Deep litter

Da kane ka rukomia ki syiar la rihapohsembasiang da u skum. Kane ka iahapbhanakabynta ban risyiar broiler bad grower breeder. Lah ban mang lypaia ka jakabakerkutsawdong ha kabalah ban pynlaitia ki syiarkattokatne por ba kin iitjingbamnamadan.



*Fig. Deep Litter System of Rearing*

### B. Backyard Farming

Da kane ka rukom, ia ki syiarlah ban ripyllait. Ka iahapna ka bynta ki syiar dual purpose kum ki kuroiler, vanaraja, rainbow rooster bad syiarkhasi.



*Dur. Backyard System of Rearing*

### C. Enclosure

Da kane ka rukom, ia ki syiarlah ban rihapoh ka semkaba ka madan ka long da ki jar. Ia ki dong ai bam bad ai um lah the nashabarjong ka sem. Lah ruh ban pyndonkam da ki dong ai bam bad ki shanglumpylleng(egg collection belts) kiba long auto-operated ne kibaiaid hi.

### D. Slatter cum Litter

Kane ka rukomrisyiar ka iahapbhana ka bynta ban riia ki jaitsyiar breeder ne kita ki syiar ha kabaia ki pyllengjongkilahbukyrpang tang ban pynpdem. Shi byntana ka madan (60%) lah ban tap da ki slat bad kabatam da u skum. Ia ki dong ai bam bad





dong ai um lah ban buh ha badonskum bad ha slatted area. Katbaia ki shangkapylleng pat lah ban buh tang ha byntabasiangskum.

*Dur. Slatter cum litter* →

### **E. High Raised Houses**

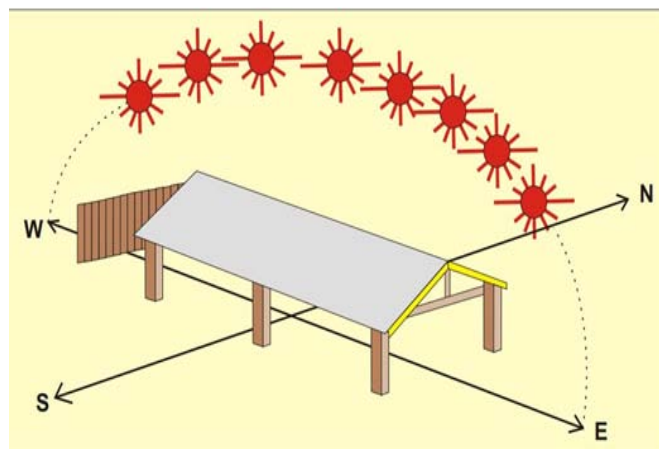
Kine ki jaitsem ki long kibaiohlyerbha. Ki kynroh ki long da ki jar bad ka jingjrongjong ka sem ka long 6 – 7 phut da kabakyrshan da ki paiadewbilat. Ka jingjngaihapedng ki paia ka long 10 phut. Ia ka rynsandewbilatkaba 2 phut ha ka jingiarlah ban shnahalor ki paia.



*Dur. High Raised House*

## KA JINGJIED JAKA (SITE SELECTION)

- Ka jaka bad ka design jong ka farm ka dei ban long katkum ki kyndonjong ka State Pollution Board.
- Ka farm kadei ban jngaikumba 100 metarna kano kano ka tyllong um bad 500 metarna kino kino ki farm.
- Ia ka farm dei ban da kerbha da ka jar ne ka kynroh bad ka jingjrongo kadei ban long 8 phut bad ka dei ban don ka jaka rung jakamihkabakhlain.
- Thungdiengsawdongjongka farm, ymduna 2 lain ka jingjngaibad ymdei ban palatia ka 3 metar.
- Ka dei ban biang ki nala.
- Dei ban shna ha ka jakaba long kynjangkhnang ban suk ban pyntuid um.
- Ka lynterjong ka sem (long axis) ka dei ban phai sha ka byntamihngi-sepngi (east-west direction) ban iadana ka jingkhluit, hynrei ha ki jakabakhriat ka lynter ka dei ban phai sha ka byntabashatei-shathie (North-South direction).
- Ka lynterjong ka sem ka shong ha ka jingbuntylli ki syiar, ki jaitsyiar bad ka rukom ban ri. Ka pyngkiangkamdei ban palatia ka 9 metar ne 30 phut.
- Ki sem ki dei ban long kibasuk ban rung ban mih, basuk ban pynkhuid.
- Ka jingjngaihpdeng ki semjong ki juh ki jaitsyiar ka dei 30 phut bad hpdengkiwei pat ki jaitsyiar ka jingjngai ka dei ban long 100 phut.
- Ka sem ka dei ban don ia ka nongrimkabaskhem ban iadaiajingsngem. U paia u dei ban long da ka dewbilat bad pynngamkumba 1 – 1.5 phut shapokhyndew bad 1 – 1.5 phut halorkhyndew.
- Ka sem ka dei ban long kabaiadana ka jingshit bad na ki khnai, ki bsein. Ka dei ban don ia ka side walk sawdongjongka.
- Ka jingjrongojong ka sad ka dei ban biangna ka bynta ka jingpynggad.
- Ka jingjrongojong ka semnamadhanaduhtduhtnum ka dei ban long 6 – 7 phut bad hpdeng ka dei ban jorong 10 – 12 phut.
- Ki sem ki dei ban shong ha kata ka rukomba kalyerkaniaidlyngbanyngkong ka brooder house, hadein ka grower house bad layer house. Kane ka iadaia ka jingsaphriangjinpang.



**Dur.Ka lynterjong ka sembaphaikhmat sha mihngi-sepngi.**

## KA RUKOM BAN SHNA SEM

- i. **Ka madanjong ka sem:** -la ka madanlah ban siangdewbilat. Ka madandei ban shnakumba 25 cm hajrongkhyndew. Ha ki sem slatted, ki slat ki dei ban iar 2.5 cm bad pyngngai 3cm. lakinedei ban buh ha shilynter ka sem bad buhkumba 100 cm na ka madanjong ka sem.

### Ka rukom ai jaka:

Rta (Taiew)	Rukomri	Kynthei			Shynrang		
		Deep litter (sq.ft)	Slat (Sq.ft)	Cage (sq.inch)	Deep litter (sq.ft)	Slat (Sq.ft)	Cage (sq.inch)
1 – 6	Brooding	0.3 – 1	0.3 – 1	56	1	1	75
7 – 16	Growing	2.5	2.5	90	3	3	135
17 – culling	Laying	3	2.6	124	-	-	180

- ii. **Kynroh:**-la ka kynrohlah ban shna da ki maw it ne maw block ne mawthup ha ka jingjrongkaba 1/3 byntanamadan. Ka byntakabashajrong, kata 2/3 bynta pat dei ban ker da ki jar kiba ki jinghehjong ki thliw ki long 12 x 12 mm. Lada ia ka semlahphiah ha ki bun kamra, ki kynrohhapdengjongkine ki semdei ban kynroh ha ka jingjrongkaba 30 cm bad ka byntakabashajrongker da ka jar nar.

- iii. **Ka tnum:** la ki tnumlah ban pyndonkam da ka tnumsaraw, skum ne da ka tnum tin. Lada tap tnum da u skum, ka jingrbenjong u skum ka dei ban long 15 cm. Ki rudjong ka tnumdei ban pyntam 1mnabarohsawdong ka sem ban iadana ka jingrung u slap hapoh sem.

- iv. **Jingkhang:**-la ki jingkhanglah ban shna ha ka jingjrongkaba 1.5m bad ka pyngkiangkaba 1.2m. Ladaka sem ka don ka passage ne ka lyntiaidnapdeng, ki jingkhanglah ban shna ha ka jingjrongkaba 2m bad ka pyngkiangkaba 1.2m. Ki jingkhanghapoh ki sem ki dei ban long 0.6m ha ka pyngkiang bad ka jingjrongkaba 1.8m. Ka trajjong ka jingkhang ka dei ban long 30cm halor ka madan. Ka byntabahatraijong ka jingkhangedei ban shna da ka lyntang bad ka byntabahajrongdei ban shna da ka jar.

- v. **Side walk:** Ban iadana ka jingrung ki khnai ne bsein, donkam ban shna ia ki side walk sawdong ka semkumba 1.5 ft ka jingheh.

### Ki jingshnabalah ban buhhapoh ka sem (Deep litter)

- a. **Perches:**- U dieng ha kaba ka syiar ka dem ka thiahla ju tip kum u perch badshna da u siejuba ka jingheh ka long ( 5 x 7.5cm). Ka jingjngaiuweinauwei u perch ka long 35 cm. buhia ki ha ka jingjngaikaba 25cm na ka kynroh bad ka jingjrongkumba 55 – 75 cm namadan. Mang 15 cm ka jaka ha u perch nakabyntakawei ka syiar. Na kabynta ki heavy breed, mang 25 cm na ka byntakawei.





b. **Shang Kha pylleng**:- Mang 1 ka shang kha pyllengna ka bynta 5 tylli ki syiar. Ka shang kha ka dei ban jylliewkumba 8cm, ka thliw ne opening ka dei ban long 18cm.



### KA RUKOM RI BAD SUMAR

- Synreitdawaipyniaphkhiangjingpanghadeinbalah dep die lutia ki syiar.
- Weng lutia ki tiar ki tar baroh bad ki jingbambasahrhukumjuh.
- Pynkhuidia ka sembarohkawei bad ka compound jong ka semruh.
- ia ka madandei ban pdem da ka um soda 24 kynta. Khleh 40 gram ha ka 1 liter ka um.Hadein ka 24 kynta, saphlerkhuidia ka sem.
- Ia ki kynrohh ki jar nar, ka sad synreit da ka dawaipyniaphkhiangjingpang.
- Niadpusharaia ka madanjong ka sem da kabakhleh 2kg ka shun na ka bynta ka 100 sq.ft ka jinghehjong ka sem ne da u 3% copper sulphate ne 3% formalin. Iehbakanrkhianh.
- Sait ia ki pipe um da ki dawaikum u bleaching powder ne da ka vinegar (1ml ha ka 1 liter ka um) lane da u 35% H<sub>2</sub>O<sub>2</sub> (15ml ha ka shilitar ka um) bah iehshimiet. Sa saithkuid da ka um.
- Lad aka sem ka long kabaskhem, bym lait lyer, fumigate ia ka shwa ban poi ki khunsiyar.
- **Fumigation**: Khleh 40 ml ka formalin bad 20 gm u potash ha ka 100 cubic feet volume. Ka jingpynsngemia ki kynroh, ka madan da ka um ka donkam shwa ban fumigate.Ki thliw ki syarbarohdei ban set shwa ban fumigate (40 kynta). Thehia ka formalin halor u potash, halor ki paiasangnakabyntabajngai tam jong ka sem.
- Hadeinba lad dep fumigate, khangkhopiakasem 24 kyntanangtasa plié.
- Lada ym long ban fumigate, dei ban pynjhiehia ka madanhaduhkynroh (3 phut) da ka formalin solution (5%) bad iehkumtohaduh 6 kyntaeiei.
- Pynbeitia ki tiar ki tar, naduh ka brooder, chick guard, dong ai bam dong ai um. Khmihbniahba ka brooder, ki switch,etc kin biang.
- Kine ki jingpynkhrehba la kdewhanengdei ban pynbiang 10 -15 sngi shwa ban poi ki khunsiyar.
- Pynkhuidbhaia ki pipe um khnang bay n ym don jakhlia ne dawaibasahkut.
- Arsngi shwa ban poi ki khunsiyarsiangskumkumba 2 – 3 inshi ka jingrben. U skum u dei ban long ubathymmai bad barkhiang.
- Ker da ki byrni ne tyrpalia ki byntabaker jar.
- Ai jingsyaidlypaia ka sem 36 kynta shwa khnangba u skum bad ka madan kin shongsyaid.
- Pynmehia ka brooder 6 – 8 kynta shwa ban poi ki khunsiyar.
- Siang kot bad berjingbamhalorjongki.lakine ki kotbasiangdei ban bujli man ka por bad wengnohiaki hadeinkattokatnesngi.

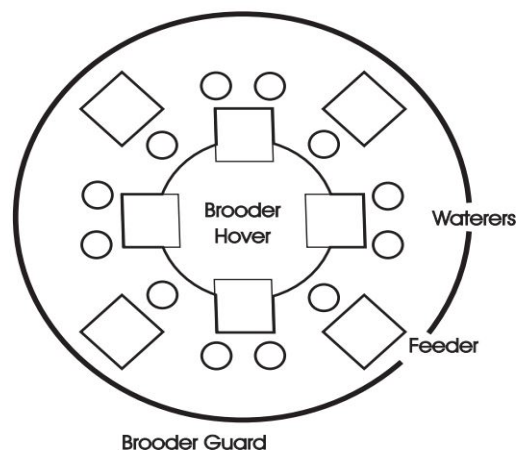
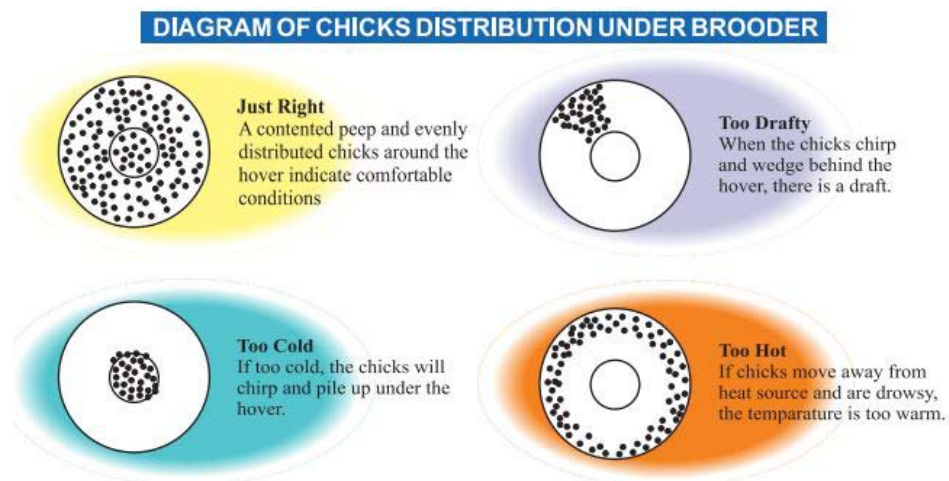


Fig. Ka rukompyntia ki dong ai bam bad ai um hapoh brooder

### KA RUKOM SUMAR IA KI KHUN SYIAR HAPOH BROODER (0 – 8 TAIEW)

- Pyllaitia ki khunsyiarhapoh ka brooder.
- Khmihbniahba ki khunsyiar kin dih um.
- Ha ki arsngei da ka um basyaid bad khleh lang bad ki electrolyte, vitamin A,D,E,C bad ladadonkam bad u antibiotic.
- Ber da u riwhadem ban i ne u jingbamkhunsyiarhngba kin ithuhia u jingbam.
- Ker da u chick guard haduh 2 taiewkhngba kin nymjngaina ka brooder.
- Ka jingdonkamjakahapoh brooder ka long 45 sq cm iaiwei I khunsyiar. Ka jingaijingsyaid ka dei 35°C ha kabsdang bad pynhiar 2.8°C man la ka taiewhaduhbakut ka 4 taiew bad kane ka shongkatkum ka jingling ka suinbneng.
- Pynbiangia ki dong ai jingbamhapoh ka 5 – 7 sngi. Ka jingrongjong ki dong ai bam kadei ban iahap bad ka ryngieng ki khunsyiar.
- Bujliia ki kotbasiang man la ka sngihaduh ban da wengnohia u chick guard kata hadein ka 7 -8 sngi.
- Dei ban pynkhuidia ki dong ai um man la ka sngi.



### KA RUKOM SUMAR IA KI 'IAR LUD (9 – 20 TAIEW)

- Ki syiarkiba la 9 taiewdei ban kynriahnoh sha ka Grower house.
- Kynriahiaki ha ka por mynmeit. Ai um ba la khlehdawai anti stress 2 sngi ban kynriah.
- Buh ia ki dong ai bam bad ai um katkum ka jingdonjong ki syiar.
- Ia ki syiarlah ban otshyntur ne de-beak, lada I donkamhashwa ka 16 taiew.
- Khmihbniahia ka jingkhiajongki ha hartakaba 8,12,16 bad 20 taiewkhngba kin ithuhia ka jing heh jingsanryntihjongki.

### KA RUKOM AI JINGSHAI

Rta (Taiew)	Ka jingaijingshai
0 – 8 taiew	Tang ka jingshaibaiohna ka sngi ka lahbiang
8 – 12 taiew	Ka jingshaibaiohna ka sngi ka dei ban long 12 kynta, lad aka dunadei ban pyndap da ki artificial

	light
12 taiewshaneng	Ai jingshai tam da kaba thang da ka light shitengkynta man la ka taiewkhangba ka jingiohjingshaihaduh ka 20 taiewkan long 16 kynta. (** hynreilada ka jingshaibaiohna ka sngi ka biangymdonkam ban ai jingshai da ka light.)

## KA RUKOM SUMAR IA KI LAYER

### A. Ka jingpynkynriah sha sem layer:

- Kynriahnohia ki 'iarlud sha sem layer shwa ba kin sdang kha pylleng.
- Shwa ban kynriahdei ban khmihbniahbabaroh ki jingdonkam ki lahbiangnoh.
- Dei ban pynkynriah ha ka por batngen ne mynmeit.
- Ymdei ban ai tika, dawaiwiew, thew ia ka jingkhiashitaiew shwa ban pynkynriahia ki.

### B. Ka rukomsumaria u skum

- Pyndonkam da u skumubabha.
- Kylla ia u skum 2 sien ha ka shisngikhngangba un shongrkhiang.
- Ha semsyiar layer, kyllaia u skum tang hadeinbalah de plum pylleng.
- U skumuba ka jingsngemjongu ka long 25 – 30%, ladhaknoitia u un pra bad hap kum u powder, hynreiuba la sngempalat u long kum ka ball.
- Set katbanbiangia ki syiarhapohsem, ymdei ban palatia ka jinghehjong ka khnang ban iarapia ka jingrkhiangjong u skum.
- Ia u skumbasngemdei ban khleh bad 1 kg ka shun na ka bynta ka 0.75 sq.m ka jinghehjong ka sem.
- Ia ka madanjong ka semdei ban rah kumba 0.3 – 0.5 m hajrong ban iadaia ka jingkyntsngem.
- Kylliangia u skumba la ktiehpalat da ubathymmai.
- Ka sem ka dei ban long kabaiohlyerbha ban shongrkhiang.

### C. Ka rukompynshongkha

- **Pen mating:** Ha kane ka rukom, la jupynshongkhauwei u 'iarkpa bad 10 -12 tylli ki 'iarkmie.
- **Flock mating:** Ha kane ka rukom, shibun ki 'iarkmiela jupynshongkha bad uwei ne artylli u 'iarkpa. Uwei u 'iarkpana ka bynta 10-12 tylli ki 'iarkmiena ka bynta ki syiar kha pylleng bad uwei u 'iarkpa ha ki 8-10 tylli ki 'iarkmiena ka bynta ki syiar bam doh.
- **Stud mating:** Hakane ka rukom, uwei'u'iarcpalah set hapoh ka sem barit ne ka ruh bad ia ki 'iarkyntheilahwallamiweiiwei ban shongkha.
- **Shift mating:** Da kane ka rukomia u 'iarkpalah rah noh ha ka sempynshongkha. Kane ka rukompynshongkha ka long ban iohia u symbaikpaubapaka.

## KA RUKOM AI BAM

### *Ki jaitjingbam*

- **Mash feed:**-lakinelahshna da kabakhleh lang iabaroh ki jingbam. Kideikibajupyndonkambha, ki long kibasuk ban shna bad ki duna ha ka jinglutjingsep.



- **Pellet feed:**- Une u jaitjingbam u pyndunaia ka jingsepei ha ka por baa i bam ia ki syiar.



- **Crumble:**-laune u jingbamlahioh da kabapynpraia u pellet feed.



## KA BHAH AI BAM IA KI LAYER

S.No	Rta (Taiew)	Jaitjingbam	Katnoyn ai ha ka shisngi
1	1 taiew	Chick feed	15 gm
2	2 taiew	-do-	25 gm
3	3 taiew	-do-	35 gm
4	4 taiew	-do-	40 gm
5	5 taiew	-do-	43 gm
6	6 taiew	-do-	46 gm
7	7 taiew	-do-	49 gm
8	8 taiew	-do-	52 gm
9	9 taiew	Grower feed	55 gm
10	10 taiew	-do-	59 gm
11	11 taiew	-do-	62 gm
12	12 taiew	-do-	65 gm
13	13 taiew	-do-	68 gm
14	14 taiew	-do-	71 gm
15	15 taiew	-do-	74 gm
16	16 taiew	-do-	77 gm
17	17 taiew	-do-	80 gm

18	18 taiew	-do-	85 gm
19	19 taiew	Layer feed	90 gm
20	20 taiew	-do-	95 gm
21	21 taiew	-do-	108 gm
22	22 taiew	-do-	116 gm
23	23 taiew	-do-	120 gm

#### KA RUKOM AI TIKIA IA KI LAYER

Sl. No	Rta	Jait tika	Dose	Kumno ban ai
1	Day old (shisngi)	Marek Vaccine	0.2 ml	S/C
2	5 – 7 sngi	Lasota Vaccine	1 drop	I/O, I/N
3	14 sngi	IBD Vaccine	1 drop	DO
4	28 sngi	Lasota Vaccine	Bad u dud powder	D/W
5	35 sngi	IBD Vaccine	DO	D/W
6	7 taiew	Fowl Pox	0.2 ml	I/M
7	8 taiew	R <sub>2</sub> B Vaccine	0.5 ml	I/M
8	11 taiew	De – beaking	½ of upper and lower beak for female	¼ of upper beak only
9	13 taiew	Fowl Cholera Vaccine	0.5 ml	S/C upper neck region
10	20 taiew	Lasota Booster	In milk	Ka khambha ha ka por 10 bajemynstep

**\*\*Ai dawaiwiehshisien ha ka laibnainaduhba ki syiar ki lah don 1 -2 bnai ka rta.**



*Dur. Intraocular route*



*Dur. Intramuscular route*

## KA RUKOM BAN RI BAD SUMAR IA KI BROILER

Kisyyar broiler ki deikita ki jaitsyarkibajuribeit tang na ka bynta ka doh. Ki iohia ka jingkhakaba 1kg700gm haduh ka 6 taiew ka rta. Ka jingriia ki syiar broiler ka kiew stet na ka snem sha ka snem da ka jingbunjongkiba bam ia ka doh jongka. Khnang ban iohnongna ka jingriia ki, donkam ban tip ha kano ka rukom ban ri bad sumaria ki, kata kum ka semkabakumnodonkam ban shna, ki jaitsymbaiaiu, u jaitjingbamubakumno bad kumtater ter.

Ki symbaisyyar Broiler:-

1. Commercial Breed:- (a) Colour broiler (b) Vencobb
2. Dual purpose Breed:- (a) Red Vanaraja (b) Kuroiler dual (c) Rainbow Rooster

## KA RUKOM SHNA SEM BAD RUKOM SUMAR IA KI COMMERCIAL BROILER

Ka sem ne ka ingkababiang ka donkamna ka bynta ka jinghehjangsankloijongkisyyar broiler. Kineharum ki long ki mat bakongsan ban bud ha kabaiadei bad ka jingriiaki:-

### A. Ka jingjiedjaka-

- Ka jaka ka dei ban long kabakylloid.
- Dei ban don ka um kababiang.
- Ka jakakadei ban long khamkynjangbakannym lang um.
- Ka dei ban jngaina ki ingbriew.
- Ka dei ban don ka surokba lait kali.
- Ka dei ban don ka light kababiang.
- Ka dei ban don ka iew ka hat ka biangna ka bynta ban thied ban tda ne ban die ia ki mar ki matanapoh farm.

### B. Ka rukom long ka sem

- Ka sem ka dei ban long kabapynngad.
- Kawei ka broiler ka donkamjaka 1 sq.ftapoh sem.
- Ka sem ka dei ban phaikhmatshaphangmihngi-sepngi( East – West direction).
- Dei ban rah ia ka level jong ka madanjong ka sem.
- Lah ban shna da kino kino ki tiar balah ban iohnashongna thaw (locally available material).

C. **Ka jingsumar (management)**:-Ka rukomsumar ka deikabadonkam tam ha kabaiadei bad ka jingriia ki syiarbroiler.Kineharum ki long ki mat kibakongsan ha ka liang ka rukomsumaria ki.

- ❖ Ka jingjiedsymbai: Dei ban jied da ki khunsyarkibabhabakynsai.
- ❖ **Ka jingpynkreh shwa ban poi ki khunsyyar:**
  - i. Synreitdawaipyniaphkniangjingpangia ka sembarohkawei.
  - ii. Weng nohia u skumba rim bad saithkuidia ki tiar ki tar.
  - iii. Pynkhuidia ki pipe um.



iv. Fumigate ia ka sem.

❖ **Brooding:**

- i. Pynmehia ka brooder 24 kynta shwa ban wanlamia ki khunsiyar.
- ii. Pynbiangia ka jingsyiadjong ka brooder. Ha ka taiewbanyngkong ka jingsyaidkadei 95°F bad pynduna 5°F man la ka taiewhaduh 70°F.
- iii. Buh ia u chick guard na ka byntashitaiew.

❖ **Ventilation:** Ka semkadei ban long kabaiohlyerbha bad pynngad bad dei ban ker da ki jar narnabaroharliang ka sem.

❖ **Ka jingshai:** Ka jingaijingshai ka long barohshisnginaduhba ki khunsiyar ki don shisngihaduh ban da die.

❖ **Ka jingaijakahapohsem:** 0.8 – 1 sq.ftiaiewi l syiar

❖ **Ka rukomsumaria u skum:**

- i. lah ban pyndonkam da u skumkurat, skumkba, jyntangkba/kewbalahdainrit bad kiweikiweikum u skumsiang.
- ii. Dei ban pyndonkam da u skumubabha bad bathymmai.
- iii. Dei ban kyllaia u skum man ka por khnangba un shongrkhiang bad un nym lang tylli.

❖ **U jingbam:** U jingbam u deiubaktahbhaia ka jingiohjingmihjong ka broiler farm. Tenamarkata, u jingbam bad ka rukom ai bam ki deikiban long kibajanai. Lada ka rukom ai bam kambianga ka ktahia ka koit ka khiahjong ki syiar.

❖ **Ki jaitjingbam:**

- i. Pre starter: Ai naduh 0 – 10 sngi
- ii. Starter: Ai naduh 11 – 21 sngi
- iii. Finisher: Ai naduh 22 sngihaduh ban da die

**KA BHAAH AI BAM IA KI BROILER**

Sl. No	Rta (Taiew)	Jaitjingbam	Mang ha ka shisngina ka byntaiwei l syiar
1	0 – 1 taiew	Broiler Pre-starter	15 gm
2	1 – 2 taiew	Broiler Starter	40 gm
3	2 -3 taiew	-do-	60 gm
4	3 -4 taiew	-do-	80 gm
5	4 – 5 taiew	Broiler finisher	120 gm
6	5 – 6 taiew	-do-	140 gm
7	6 – 7 taiew	-do-	160 gm
8	7 – 8 taiew	-do-	170 gm

**KA RUKOM AI TIKA IA KI BROILER**

Sl. No	Rta	Jait tika	Dose	Kumno ban ai
1	Day old (shisngi)	Marek Vaccine	0.2 ml	S/C
2	5 – 7 sngi	Lasota Vaccine	1 drop	I/O, I/N
3	14 sngi	IBD Vaccine	1 drop	DO
4	28 sngi	Lasota Vaccine	Bad u dud powder	D/W

## BACKYARD POULTRY FARMING

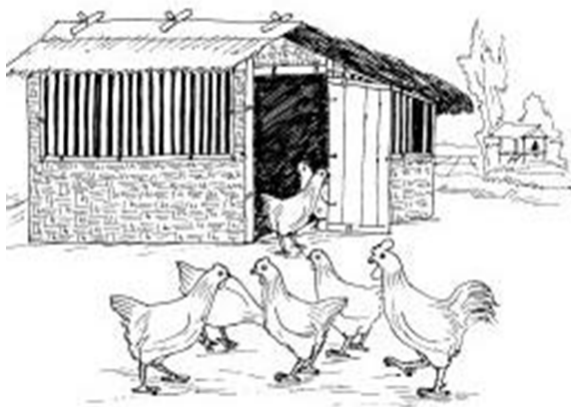
Ki syiarkum ki Kuroiler, Giriraja, Rainbow rooster ki kha pyllengkumba 130 – 140 tylli ha ka shisnem. Lada ri bad sumarbhaia ki, kin sdang kha haba ki don 22 – 26 taiew ka rta. Katba ka syiarkhasi ka kha 70 tylli ki pylleng ha ka shisnem.

### A. *Ki nongrimjong ka sembabha:*

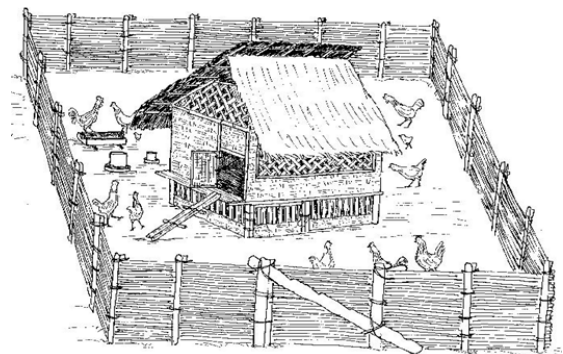
- Ka semsyiarka dei ban iadana ka lyerkabajur.
  - Ka jingiadana u slap lah ban ioh da kabashnabhaia ka tnum bad pyntamia ka nasharudsawdong ka sem. Lah ban pyndonkam da u traw ne da ka tin (CGI sheet).
- B. ***Ka sem da ka madankhyndew bad u skum:***Khngamba ki syiar kin bha kin miat, donkam ban shna ka semkababiangnadong shading. U skum (5cm) lah ban pyndonkam da ki phlangbalahot, skumkurat, skobkew/kba bad kiweikiwei.
- C. ***Ka semhalor ki diengbong neng bad ka slatted floor:***lakane ka semlah ban shnahalor ki diengbongneng bad ka madanpyndonkam da ki siejkiba 1cm ka jingrben bad pyllaitjakahapdengjongkikumba 1 -2 cm. Ka byntabashapohjong ka sem ha kaba ka sbohsyiar ka hap dei ban da kerkhngamba ki syiar kin nymioh rung.

### *Ki jingmyntoi:*

- I. Ka iadana ka jingioh rung jong ki bsein, ki khnai bad kiweikiwei.
- II. Ki syiar kin nymiakynduh ne bit ia ki jakhliajong ki.
- III. Ymdonkam ban siangkum, kane ka pyndunaia ka bai nongtrei.
- IV. Ka sem ka iohlyerbha.



*Dur. Ka semsyiar ha nongkyndong.*



*Dur. Ka semba set ia ki syiarmynmeit*

## KI TIAR BA PYNDONKAM HAPOH SEM

1. **Dong ai bam:**la ki dong ai bam lah ban shna da kino kino ki tiar ( kum ka taiar kali). Ai jakakumba 6-8 cm iakawei ka syiar. Ban pynduna ia iajinglehnohei u jingbam, ki shynturjong ka dong ai bam ki dei ban long 2 cm. Ki dong ai bam ki dei ban iaryngkat bad ka ryenieng ka syiar ( da kababuh da ki maw ne diengnatrai).

2. **Dong dih um:** ka um ka long kabadonkamia ki syiar la set ne pyllaitia ki shabar. Ha ka por ba shit, ki syiar ki dih um arshah. Namarkata, hap khmihbniahi aka rukomdih um jongki.Ymdei ban pyndunaia ka umdihhapoh sem. Ka um kabakhuid bad ka jingai um kababiang ka pynlongia ki syiarkibashaitbakoit bad ba kha pyllengkambha.
3. **Shangkha pylleng:** Dei ban mangkaweinbeartylli ki shangkha ka bynta 5 tylli ki syiar. Lah ban shnaia ki shangkha da kino kino ki mar ki mata bad dei ban buh ha ka jaka bad um bakyndong. Siang da u skumbathymmai bad sumarkhuidia ki. Ha ka por shit buhia ki shangkha ha ka jakabapynngad.
4. **Skumsiang:** U skumsiang u pyndunaia ka jingiohjingpang, khamtamia ki khunsiyarkibalah ban iohjingpangna ka daw ka jingkhriat, ka jingsngem bad ka Iyerpjah. U skum u kjitia ka jingsngem.

### **Ka jingjiedia ki syiarkmie**

- Ka syiarkababhakan I jakhlia bad I blad, namar ka jingka bun tylliki pylleng.
- U culling hook la jupyndonkam ha kabakemia ki syiarna ka bynta ban eksaminia ki.



*Dur. Ka jingkemsiyar da kabapyndonkam da u culling hook*

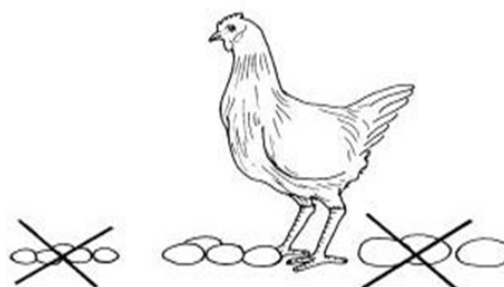
### **KA JINGPYNPDEM PYLLENG**

#### **1. Ka rukomsumarhabapynpdempylleng**

- Ka rukompynpdempyllengkababiang ka pynmihshibuntylli ki khunsiyar.
- Ka jingbuntylli ki pyllengba kha bad ka jingbuntylli ki khunsiyarbamih ka shong ha kine ki mat harum:
  - Ka jingbha u jingbam bad ka manga i bam kababiang
  - Cock:Henratio:- Ban pyntiknaba ki pylleng ki dap ki biang, pyniashonhkhaiauwei u 'iarkpa bad 10 tylli ki 'iarkmie. Lada ki 'iarkmie ki palatia ka 10 tyllidonkam ban buhsauwei u 'iarkpa.
  - Ka rukom long ka jaka kha pylleng bad ka jakapdempylleng.
  - Ka rukombuhia ki pylleng ha ka por b aka syiar ka dang kha.
  - Ka rtajong ki pylleng ha ka por bapynpdem.
  - Khmihbniah b aka syiar ka dei ban ioh da u jingbambabha.

#### **2. Ka jingjiedia ki pylleng:-**

- Jied tang iakito ki pyllengkibakhuid bad ryntih ha ka jingheh. Lada phi pynpait ia ka pylleng ka pyllengkababha ka pyllunkatbakabasniew ka pra.
- Donkam ban lumia ki pylleng man la ka por, ha ka por mynstephaba ki syiar ki kha pylleng. Ban pynshluria ka syiar ban kha pyllenghapohshang, iehnohkawei ka pyllenghapoh ka shang kha bad buh dak iakata ka pylleng da u let.



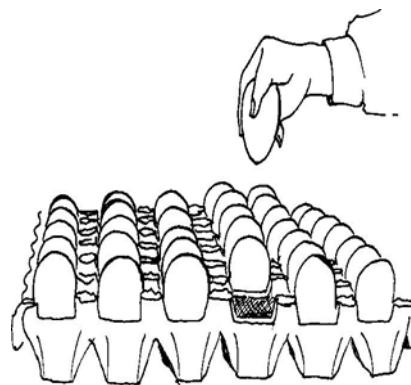
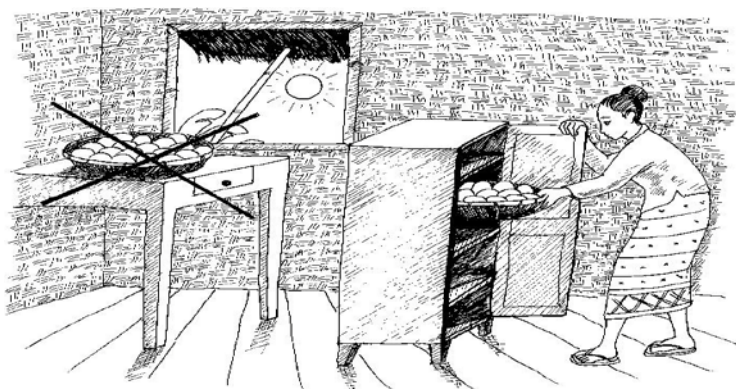
RIT PALAT: Hapoh 45 gram (kine ki lah ban nym don khangai)

BIANG: 45 – 70 gram

HEH PALAT: Palat ka 70 gram ( kilah ban don 2 tylli ki khangai)

**Ka rukom ban buhia ki pylleng**

- Ia ki pyllengdei ban buhbha. Buh ia ki ha ka jakakabadum bad pjah. Katbanangpjah kata dang lah ban buhslemia ki. (15 – 20° C)
- ***Khngba ki pyllengbapynpdem kin long khunlut:-***
  - Buh ia kipyllenghabadum ne bymdeisngi.
  - Wat buhia ki pylleng ha madan. Iadana ka jingrung ka lyerpjah haka jakababuhia ki.
  - Buh ia ki pyllengda ka byntakaba nep shapoh. Dakane ka rukom, u air cell jong ka pylleng un don sha jrong.
  - Lada hap ban buhia ki pyllengshitaiew, dei ban kyllaia ki man la ka sngi.
  - Wat saitia ki pylleng. Ki pyllengba bit jakhliapatymdei ban pyndonkam ban pynpdemkhun. Pyniapheria ki pyllengjongkaweipakawei ka syiar da kabaruid dak da u let.
  - Ka por baslem tam ban buhia ki pylleng ka shong ha ka rukombuhia ki, ka jingsyaidjingkhriat. Katbanangkhriat kata dang lah ban buhia ki pyllengkhlem da sinew.
  - Kum ban shupynkynmaw, ia ki pyllenglah ban buh tang haduh 7 – 10 sngi, hadeinkane ka por, ka jinglongkhunjongkihabapynpdemkanduna.












**KA JING AI TIKA**

Sl. No	Rta	Jait tika	Dose	Kumno ban ai
1	Day old (shisngi)	Marek Vaccine	0.2 ml	S/C
2	5 – 7 sngi	Lasota Vaccine	1 drop	I/O, I/N
3	14 sngi	IBD Vaccine	1 drop	DO
4	28 sngi	Lasota Vaccine	Bad u dud powder	D/W
5	35 sngi	Fowl Pox	0.2 ml	I/M
6	7 taiew	R2B Vaccine	0.5 ml	I/M

**KI JINGPANG BAD KUMNO BAN IADA**

Ha kabaiadei bad ka jingrisyiar, ka jingiadana ki jingpang ka long kabadonkamshibun. Ki jingpangsyiarbakhamkongsan ki long kumneharum

<b>A</b>	<b>Viral Disease</b>	<b>Ki dak jong ka jingpang</b>	
	i. Ranikhet/New Castle Disease	a. Kane ka jingpang ka ktahlutiabaroh ki jaitsyiar. b. Shitom ban ring ne pynhiarmynsiem c. Mih um nakhmut d. Ymlah bam e. Pynhiarrongjyrngam f. Ka jingiap ka long 90 – 100% g. Ban iada ai da ka tika Lasota bud s aka tika R2B	 
	ii. Marek's Disease	a. Ka ktahlutiabaroh ki jaitsyiar b. Ki thapniangki noh, ki dkoh bad iapshiliang. c. Ka jingiap ka long 60 – 70 % d. Ai jingiada da kaba ai tika	
	iii. Infectious Bursal Disease	a. Ka dak ba paw ka dei ka jingnoh ka khlieh b. Ka syiar ka long dynngur, ka tdong ka bit jakhlia c. Pynhiarronglieh d. Ban iada ka long da kaba ai tika bad bud ia ki Biosecurity measures	
	iv. Avian Influenza	a. U shyrtong bad u tmoh ki jngemsnam b. Ki kjat ki sieb um c. Ki ring mynsiemnashyntur d. Ban iada, dei ban die lutia ki syiarkibalahiabit, pynkhuidiaka sembarohkawei.	
<b>B</b>	<b>Bacterial Disease</b>		

	i. Salmonellosis	a. Pynhiarronglieh (chalky white) b. lapkynsankynsan c. Kat dong ka bit jakhlia d. Kaktahlutiabaroh, naduhbaehhaduhbarit e. Ka syiar ka long dynngur bad hiar ha ka jingkhia f. Ai da ki dawai antibiotic (lakynduhia ki Doctor kibahajan) g. Ki syiarkibalahkoit, ki long kum ki nongpynsaphriangiakane ka jingpang.	
	ii. Colibacillosis	a. Ka ktahlutiabaroh, naduhbaehhaduhbarit b. Ki syiar ki pynhiar c. Ki mat ki at d. U shyrtong bad u tmoh ki sieb e. Ka jingiap ka long 90% f. lakynduhia ki doctor kibahajan.	
C	Fungal Disease		
	i. Brooder Pneumonia/Aspergillosis	a. Ka ktahia ki khunsyiar b. Ka jingiap ka jurbha c. Ki shitom ha ka jingringjingpynhiarmynsiem d. Ki khmat bad ka khlieh ki sieb e. lakynduhia ki doctor kibahajan.	
D	Helminthic Disease	a. Ka ktahbhaia ki 'iar kha pylleng b. Kim lah bam c. Kim heh kimsan d. U sner u puh e. Pynhiar f. Ai dawaiwieh man la ka 3 bnai	
E	Protozoan Disease		
	i. Coccidiosis	a. Pynhiarsnam b. Ki thapniang ki noh c. Ka jingiap ki syiar ka bun <ul style="list-style-type: none"> <li>▪ Jingsumar: <ul style="list-style-type: none"> <li>I. Ka rukomsumarkabajanai</li> <li>II. lakynduhia ki doctor kibahajan.</li> </ul> </li> </ul>	

**Kumno ban iadaia ki jingpang:-**

- Ri da ki syiar ki bawanrahna ka sem ka bym don kano kano ka jingpang.
- Ai tika R2B bad Marek.



- Ai da ki Coccidiostat ban iadaia ka jingpang coccidiosis.
- Peitbniahba u jingbam um dei ban phuh tit ne don aflatoxins.
- Wat shah rung briewkulmarhapoh farm. Ki nongiarap ki dei ban phong da kiwei ki jainhaba ki rung hapoh sem.
- Tap ia ka madan da u skumubabha, kumba 3 inshi ka jingrben.
- Ka rukomri “All-in – one” ka pyndunaia ki jingpang.
- Buh ia ki footbath ha shwa ban rung.
- Pynbiang ka um bad ka dei ban long kabakhuid.

### KA JINGBUH JINGTHOH (RECORDS KEEPING)

Ka jingbuhjingthoh ka iarap ha kaban tip ia ka jingdonjingembad kajinglutjingsepjong ka farm. Ka jingbuhjingthoh ka donkamna ka bynta ban iadaiakijingrijingdup bad ka iarap ban tip ia ka jingkhlain bad jingdunajong ka kamrisyiar.

#### KA JINGBUH JINGTHOH HA KI BREEDING FARM NE KI FARM BA PYNMIH KHUN SYIAR

##### 1. **Basic Register:** Kine ki kynthupiakineharum:-

- a) **Attendance and Daily wages register:** ha kane ka register lah ban thohiaia ki kyrteng ki nongiarap, ka jingwantreijong ki bad ka bai byllaba siew ia ki.
- b) **Building Register:** Hangne la thohia ki sem bad ka jinglutjingsepha kabaiadei bad ka jingpynbhapynmiatia ki.
- c) **Equipment Register:** Ha kane ka register la jubuhjingthohia ki tiar ki tar bapyndonkamhapoh farm.
- d) **Feed and feed ingredient register:** hangne la jubuhjingthohia u jingbamba ai, kata katno ka opening balance (kaba tam mynshwa), nangnothied bad katno kilo thied, katno la ai bam ia ki syiar ha ka shisngi bad kiweikiwei.
- e) **Feed additives and medicine register:** Kane ka dei ban buhjingthohia ki dawaidashin, tika, ki dawaisynreitsem bad kiweikiwei.
- f) **Miscellaneous register:** Kane ka dei ban buhjingthohia ki tiar khutiamutiakum ki bulb bathied bad kiweikiwei.

##### 2. **Technical register:** Hangnelahjubuhjingthohia ki symbai bad jaitsyiarbari.

- a) **Breeding farm register:** Na ka byntakawei ka kynhun, ka jingiohnaduhbasdanghaduhbakutdei ban buhjingthoh. Bad ka jingbuhjingthoh ka dei ban long la la ki jong ki jaitsyiar ne ki kynhunsyiar.
- b) **Egg turn out register:** Kane ka dei ban buhjingthohia ki pyllengbaiohlumna ki kynhunsyiar man la ka sngi. Kumjuhruh, ia ki pyllengbapait, ki bym long ban pynpdem. Ka jingdieia ki pyllengdei ban kyntiew man ka sngi.

##### 3. **Hatchery records**

###### a) **Stock register:**

Tarik	Opening balance	Receipts	Settings	Discards & sales	Chick produced	Chick sold	Chick culled	Free chicks	Remarks

- b) **Batch-wise hatchery sheet:** Da kanelah ban buhjingthohia ki jingbuntylli ki pyllengbapynpdem, ki jaitpylleng, tyllongjong ki pyllengba rah sha hatchery, ki pyllengbym long khun ha ka por ba candling, ka jingbuntyllijong ki khunsyiarbamih, ka jingbuntyllijong ki khunsyiarbatlot, ka jingbuntyllijong ki khunsyiarshynrang bad ka rukom die ia ki, bad kiweikiwei.

- c) **Chick out turn and disposal register:** Hangnelah ban buhjingthohia ki khunsiyarbaiohnabapynpdem, ki khunsiyarba die, ki khunsiyarbabuhna ka byntaialade, khunsiyarba la kyntait, khunsiyarbasamei sha ki bried bad kumtater ter.

**4. Poultry performance test register:-**

- a) **Layer farm:** Ka kotbuhjingthohia ka jingiohna ka shikynhun ki syiar. Ia ka jinglongjingmanjong ki syiarhaduh ban da kutdei ban buhjingthoh.
- b) **Broiler Farm:**Na ka byntakawei ka kynhun bad kaweikawei ka sem, ka jingmih bad jinglongjingmanjong ki syiar, naduhbasdanghaduhbakutdei ban buhjingthoh.

## HATCHERY DESIGN

### A. Ka rukom long ka jaka

- Ka ing hatchery ka dei ban jngainakiwei ki semrijingri.
- Ka jaka ka dei ban long 2500 ft (760m) hajrong ka sla duriaw (sea level), ladaduna,kandon ka jingduna ka oxygen.
- Ka dei ban jngai 500 ft na ki semsyiar.
- Ka dei ban don ka um bakhuid.

### B. Ka plan jong ka hatchery

- Ka hatchery ka dei ban don kawei ka jaka rung bad kawei ka jaka ban mih.
- Dei ban shna ha kata ka rukombakan long ha ka juh ka lain na ka bynta bansuk ka rah ban rongia ki pylleng bad ki khunsiyar bad ka jingrungjingmihjong ka lyerruhkadei ban long ha kane ka rukom.
- Ka dei ban long ha kata ka rukomia ki pyllengbapynpdemlah ban pdiang ha phalor ban rung 9 entrance) bad ia ki khunsiyar ha ka phalor ban mih (exit).
- Ka dei ban long kaba heh khnang ban lah ban nangpynhehshuhshuhladaonkam.

### C. Ka rukom ban shna

- Ka ing hatchery ka dei ban don la ka jong ka jong ka kamra ban trei.
- Ka jingjrongjong ka sad ka dei 10 ft.
- Ia ki kynroh bad madandei ban shna da ki tiles ne da kino kino ki mar basuk ban pynkhuid bad ki bym bat jakhlia.
- Ia ki kynrohjong ka hatchery dei ban shna da ki tiar bymkem ding.
- Ki jaka rung bad jakamihkimdei ban don tyngkong (threshold) bad ki deiban iar bad heh ban suk ka rah ka rong tiar. Ka jingjrong ka dei ban long 8 ft ka jingjrong bad 4 ft ka jingiar bad ki jingkhang ki deikiba plie arliang.
- Ka madankadei ban long kabaskhem.
- Ka madan ka dei ban nohsharingmalu mala kumba 0.5 inshi ha ka 10 phut.
- Dei ban pynkhuidia kinur um man ka por khnang ban nymshakutjakhlia.
- Ki nur um ki dei ban long kiba heh khnangbaladapyntuid um bun ruh kin nymshleisharud.
- Ka lyer ka dei ban iohiaidlyngbanyngkongnajakabakhuid bad mih sha jakabajakhlia, ha ka juh ka lyntiiaid.

### D. Ki jingtei

- Ki kamra ka hatchery ki dei ban biang ha ka jingheh, katkum ka jingheh ka incubator ne korpyndempylleng.
- Ka dei ban don kine ki kamrakumba la kdew ha rum-

- 1) Ban buhpylleng
- 2) Ban buh tray pylleng
- 3) Fumigation
- 4) Pynpdemkhunsiyar
- 5) Pynmihkhunsiyar
- 6) Ban Jiedia ki khunsiyar
- 7) Ban buh tiar buh tar
- 8) Jaka saitia ki tiar ki tar

#### E. Kamra ban bujljain

- Shnaiakakamra barit shwa ban rung khnang ban bujljain shwa ban rung shapoh ka jaka.
- Kane ka kamra ka dei ban don jakasaitkti
- Buh ia ki jingwiehkjat (foot bath) shwa ban rung sha jakapynpdempylleng.

#### F. Handling room

- Ia ki pyllengdei ban rah sha hatchery lyngba ka jingkhngbakyrpang. Ki nongtrei ha farm ki dei ban rah iakine ki pylleng bad ai ha khmatjaka ban rung shapoh.
- Ka jingjied bad jingpynbeitia ki pyllenghapoh tray dei ban leh ha kane ka kamra. Ka jinghehjongkane ka kamra ka shong ha ka jingdonjong ki pylleng bad ruh ha ka jing don ki tiar ki tar ban pyndonkam.
- Ka jingsyaidjongkane ka kamra ka dei ban long 18-20°C bad ka jingsngem ka dei ban long 70 – 80%

#### G. Kamra buhpylleng

- Kane ka kamrakamdei ban don jingkhngit bad dei ban sianglyntang.
- Ka jingjrngjong ka kamra ka dei 8 ft.
- Dei ban buh A.C. khnangba ka jingsyaidjingkhriatkan long kabaryntih.
- Lada ym don A.C., mynmeitlah ban plie ia ki jingkhngkhngba ka lyerpjahkanioh rung. Ha ka por mynsngiba shit, dei ban khngia ka.
- Lah ban buhia u tiar ban pynsngemia ka kamra.



*Dur: Ka kamra buh pylleng*

#### H. Fumigation room

- Ka fumigation room ka dei ban don hapeng ki kamra egg handling bad setting bad ka dei ban long kum ka khydop.
- Kane ka kamrakadei ban rit bad ka bym lait lyer.
- Kane ka kamra ka dei ban don ka slow rotating ventilator, exhausting ventilator, air inlets ha traikhngan ban ioh ban khng ha ka por ba fumigate ne ban spray dawai.

#### I. Setting room

- Ki setter ne ki korpynpdempyllenglahbuh ha kane ka kamra. Ka jinghehjongkane ka kamra ka shongkatkum ka jaitkorbapyndonkam.
- Pyllaitkumba 3 phut nabarohsawdongkane ka machine ne kor bad 10 phut hapdengartylli ki machine ne korladapynphaimarkhmat.



- Ka ventilation system ka shong ha ka jait machine ne kor bad ka jingheh ka kamra.
- Buh ia ki plastic tube ha ki air outlet jong ka machine ne korkhnangba ka lyerkhluitnapoh ka machine kaniohmih.

*Dur: Ka setter*

#### **J. Candling and Transfer room**

- lakane ka kamrashnahapdeng ki kamrababuhia ka setter bad hatcher.
- Ai jakakylloid ban suk ka iaaid ka ieng, ka rong ka rah.
- Mang iakawei ka jaka bad um na ka bynta ban khmihia ki pylleng la ki long khun ne ym long.



*Dur: Ka kamra ban leh candling*

#### **K. Ka Hatching room**

- Ka jing heh ka jaka ka dei ban long kum ka kamrajong ka setter.
- Pyniakhladiakane ka kamrada ka kynjakhyrdop bad ia ka jingkhang ban leit sha ka kamraba don ka setter dei ban khang lait noh tang habapynkynriahia ki pylleng.
- Buh ia ki air exhaust ventilation system ha u air outlet jong ka incubator

#### **L. Ka Chick Handling room**

- Ka jinghehjongkane ka kamra ka shongkatkum ka jingbuntyllijong ki khunsyiar bad ka jinghehjong ki synduk. Hangne, la jiedia ki khunsyiarshynrang bad kynthei, la ai tika ia ki bad thephapoh ki synduk.



***Dur: Hatcher***

**M. Ka Wash room**

- Kane ka kamra ka long na ka bynta ban saitia ki tiar ki tar
- Ka dei ban biang ka um.
- Buh ia ka daborbahehkhngan ban ioh ban pdemia ki synduk bat hep khunsyiar.

**N. Ka storage room**

- Hangnedei ban buhia ki synduk bat hep khunsyiar bad kino kino ki tiar balah dep pynkhuid.

O. **Waste room:**-Hangnelah ban buhia ki tin bretjakhlia.

**P. Kiweikiwei ki kamra:**

- Kamra sum bad jakaleitshabarna ka bynta ki nongtrei
- Ka kamrana ka bynta ki tiar ki tar kum u generator, water cooler bad kiweikiwei.
- Baroh ki hatchery ki dei ban don u generator bad ka alarm ban iathuhhaba duh lait.
- Baroh ki hatchery ki dei ban don ka secondary alarm system ban kdewia ka jingshitjingkhriat.

### KA JINGRI IA KI SYIAR TURKEY

- Ka doh jong ka turkey ka long kabadunakhleinnabaroh ki jaitsyiar.
- Ki indigenous bad non-descript turkey la shem ha Kerala, Tamilnadu bad Uttar Pradesh
- Ka jingriia ki syiar turkey ka bun bha sha ki risepngi.
- Ka tynraijong ka syiar turkey ka deina North bad Central America; bad ri Europe.

### KI KYNTEIN BA PYNDONKAM HA KABA IA DEI BAD KI SYIAR TURKEY

1. Tom- U syiar turkey
2. Hen- Ka syiar turkey
3. Poult- Ki khunsyiar turkey
4. Snood or Dew Bill- Ka doh kabasdein ha dur khmat
5. Caruncles- Ka doh kabasdein ha khlieh bad ryndang
6. Dew lap- ka sniehkabasnohharumtmoh.
7. Beard- U tmain ha ka byntajong ka shadem
8. Strut- Ka rukomiaid u syiar turkey ha kaporiashongkha

### KI JAIT TURKEY

1. Broad breasted bronze
  2. Broad breasted white
  3. Beltsville small white
  4. White turkey- kane ka iahapbha ha ri India.
- **Broad Breasted bronze:**
- Ka rongjong ki sner ka iong
  - Ki syiarkynthei ki don ia u snershademubaiong bad liehnakhmut.
- **Broad breasted white:**-Kine ki dei ki cross hapdeng ki broad breasted bronze bad white Holland.

### KA JINGKHA PYLLENG

- Ki sdang ban kha pyllengnاده ka 30 taiew ka rtajongki
- Ka jingkhapyllengka long 24 taiewnادهba kha nyngkong.
- Ki kha 80 – 100 tylli ki pylleng ha ka shisnem.
- 70% na ki pylleng kin kha ha ka por mynsngi.
- Ki pylleng ki thohbriaw saw bad khia 65-80 gram.
- Ka pylleng turkey ka don 13.1% ka protein, 11.8% lipid, 1.7% carbohydrate, 0.8% mineral bad 15.67 – 23.97mg/gm ka cholesterol.



**KA DOH SYIAR TURKEY:**-Ka deikabadunakhleinbha bad ka long kabatei met. Ka don 24% ka protein, 6.6% ka khlein, ka energy value ka long 162 calorie/100 gm ka doh. Ka don ruhia ki mineral kum u potassium, magnesium, iron, selenium, zinc bad sodium. Ka bun ka amino acid, niacin, vitamin B6 bad B12, unsaturated fatty acid, essential fatty acid bad ka duna ha ka cholesterol.

### KA RUKOM SUMAR IA KI TURKEY

- Ka rukom ban sumar ka iasyriemkumka barisyiar lait noh tang haba ki dang don kumba 1 – 15 sngi ka rta.
- Ka jingpdempylleng ka shim por tang 28 sngi.

	Temperature	Relative humidity
Setter	99.5	61-63
Hatcher	99.5	85-90

### KA RUKOM BAN PYN SYAID IA KI KHUN SYIAR

- Por lyiur: Buh ia ka brooder ne shangpynsyaidnadh 0 – 4 taiew
- Por tlang: Buh ia ka brooderne shangpynsyaidnadh 0 – 6 taiew
- Ki jait brooder ne shangpynsyaidbajupyndonkam ki long ka Hoover brooder, electrical brooder infra-red bulb, gas brooder lane ka traditional brooding.
- Ka jingsyaidhapoh brooder ka dei 32°C bad pynduna 5°C man la ka taiew.

### KI MAT BUH JINGKYNMAW HAKAPOR BA AI JINGSYAID

1. Ka jingaijakana ka bynta 0-4 taiew ka rta ka long 1.5 sq.ftia I wei.
2. Pynbianglypaia ka brooder house 2 sngi shwa ban poi ki khunsyiar.
3. Ka jingjrongojng u poult guard ka dei 1 phut
4. Ka jingsyaidbadonkam ha kabasdang ka long 95°F bad pynduna 5°C man la ka taiewhaduh 4 taiew ka rta.
5. Pyndonkam da ki dong ai um bajyndonng.

### FORCE FEEDING

1. Ai 100 ml ka dud ha ka 1 litre ka um bad kawei ka pyllengphonna ka bynta 10 tylli ki khunturkey bad ai haduh 15 sngi.
2. Khringia ki khun ban bam da kaba tied jaijai da ki sympriahktiia ki dong ai bam. Ka jingbuhia ki maw babunrong ha ki dong ai bam ne ai um ruh ka khringia ki khun ban bam bad dih um. Kyndiatkhynsoit ki jhurjyrngamlah ban khleh lang bad u jingbamba kin bam bha.

### KA RUKOM BAN RI

#### 1. FREE RANGE SYSTEM

##### Jingiohjingmyntoi-

- Ka pynduna ha ka jinglut u jingbam da kumba 50%
- Ka duna ha ka jinglutjingsep
- Ka heh ha ka cost benefit ratio.

- Ki kloï ban don wieh ne ki thyllahladari da kane ka rukom, namarkatadonkam ban ai dawaiwiehshisienshibnai bad synreïtdawaipyniaphyllah ne ksi.

## 2. INTENSIVE SYSTEM

### Ka sem:-

- Ka jingjinhapdengartylli ki sem ka dei ban long 20 meter.
- Ka semba set iakiba dang rit ka dei ban jngai 50 – 100 meterna ka semba set iakiba heh.
- Ka pyngkiangjong ka semkamdei ban tam palatia ka 9 meter.
- Ka jingjrongjong ka semnamadhanhaduh ha tnum ka long 2.6 – 3.3 meter.
- Pyntamia ka tnumjong ka sem 1meter nabarohsawdong.
- Ka sem ka dei ban skhem bad rkhiang.
- Ka jingaijaka bad ki dong ai bam ki dei ban biangna ka bynta ki syiarbalah heh.



## KA RUKOM BAN KEM BAD BAT IA KI TURKEY

- Pyndonkam da u dieng
- Ker dumia ka kamra shwa ban kem
- Kem na ki kjat
- Ymdei ban rah khongpongia ki palatia ka 3 ne 4 minit.



## KA JINGAI JAKA

Rta	Ka jingaijakaiaieiwei (sq.ft)	Ka jingaijaka ha ki dong ai bam (cms)	Ka jingaijaka ha ki dong ai um (cms)
0-4 taiew	1.25	2.5	1.5
5-16 taiew	2.5	5.0	2.5
16-29 taiew	4.0	6.5	2.5
Turkey breeder	5.0	7.5	2.5

## KA RUKOM BAN AI BAM

- U jingbamsyiar turkey u kynthupia u starter feed bad turkey finisher.

- Ka jingdonkam energy, protein, vitamins bad mineral ka bun habaianujor bad kiwei ki syiar.
- Ai bam ha kaporbathgen
- Ai ia ki shell grit 30 – 40 gram ha ka shisngi ban pynkhlainia ki kjat.

## KA BHAH AI BAM

### Ka bhah ai bam iakiba dang rit

### Jaitjingbam

- |                                   |   |                |
|-----------------------------------|---|----------------|
| ➤ 0-1 taiew---16 gm/iwei /shisngi |   | Turkey Starter |
| ➤ 1-2 taiew ---30 “               |   | “              |
| ➤ 2-3 taiew ---36 “               |   | “              |
| ➤ 3-4 taiew --60 “                |   | “              |
| ➤ 4-5 taiew ---72 “               | “ |                |
| ➤ 5-6 taiew -90 “                 |   | “              |
| ➤ 6-7 taiew ---96 “               | “ |                |
| ➤ 7-8 taiew --100 “               | “ |                |
| ➤ 8-9 taiew --112 “               | “ |                |

### Ka bhah ai bam ia ki ‘iarlud/bad ba heh

### Jaitjingbam

- |                                   |                 |
|-----------------------------------|-----------------|
| ➤ 9-10 taiew- 128 gm/iwei/shisngi | Turkey Finisher |
| ➤ 10-11 taiew – 134 “             | “               |
| ➤ 11-12 taiew — 140 “             | “               |
| ➤ 12-14taiew- 150 “               | “               |
| ➤ 14-15 taiew – 154 “             | “               |
| ➤ 15-18 taiew — 160 “             | “               |
| ➤ 18-20 taiew- 170 “              | “               |
| ➤ 20 taiewshaneng - 220 “         | “               |

### Ka rukom long ka met ka phad

- Ki shynrang ki khamkhia bad don u tmainbaiong ha shadem
- U dewbill u heh, sngaid bad u long kum u jri.
- Ki caruncle ki sdang ban mihhaba ki lahdon 5 taiew ka rta.
- Ki khunshynrang ki sdang ban iaid ne shad kum ha kaporshongkha wat haba ki dang don tang shisngi ka rta.

**Ka jingpynshongkha:**-Buh uwei u shynrangna ka bynta 5 ngut ki kyntheiia ki ba turkey kibapdeng (medium type) bad uweina ka bynta 3 ngut ki kyntheiia ki jai tba heh (large type). Kumba 40 – 50 tylli ki khunlah ban iohnakawei ka kmie. Ia ki shynrangymjupyndonkmashuhia ki hadeinshisnem bad deibujliia ki man la ka 15 sngihabapyniashongkha.

1:5 male female ratio at RPBF Kyrdemkulai



Shynrang – kynthei ratio	1:5
Ka jingkhia ka pylleng	65 grams
Ka jingkhiajongikhunsyaribashisngi	50 grams
Ka rt aba ki long 'iarlud	30 taiew
Ka jingbuntylli ki pyllengba kha	80-100
Ka jingjriong ka por pynpdem	28 sngi
Ka jingkhia ha ka 20 taiew	4.5 – 5(kynthei) 7-8 (shynrang)
Ka jingkhapylleng	24 taiew
Ka rtabalah ban die noh	14 -15 (shynrang) 17 -18 (kynthei)
Ka jingkhiabalah ban die nohia ki	7.5kg (shynrang) 5.5kg(kynthei)
Ka jinglah ban pynkylla doh ia u jingbam	2.7 – 2.8
Ka jingbamhaduh ban da die	24 – 26 kg (shynrang) 17 – 19 kg(kynthei)
Ka jingiap ha ka por ba ki dang rit	3 -4 %

<b>Rta</b>	<b>Jait Tika</b>	<b>Rukom ai</b>
7 <sup>th</sup> sngi	ND – F1 Strain	Pynjawnakhmat
10 <sup>th</sup> sngi	IBD Strain	Pynjawnakhmat
28 <sup>th</sup> sngi	NDVH – Lasota	Pynjawnakhmat
6 <sup>th</sup> taiew	Fowl Pox	Sub Cutaneous
8 <sup>th</sup> taiew	Cholera Vaccine	Sub Cutaneous
10 <sup>th</sup> taiew	R2B	Intra Muscular
14 <sup>th</sup> taiew	Fowl Pox	Sub Cutaneous
18 <sup>th</sup> taiew	RDVK	Sub Cutaneous

#### ECONOMIC PARAMETERS

#### KA RUKOM AI TIKA IA KI TURKEY

## KA RUKOM RI IA KI QUAIL

### KATTO KATNE SHAPHANG KI QUAIL

- Ki sdang kha pylleng – 6 taiew
- Ka jingkhia – I khun in khia10 gram bad kiba heh ki khia 200 gram
- Ka jingdonkamjaka ban ri ka duna.
- Lah ban riia ki ha ing.
- Ka pylleng bad ka doh jong ki ka long kabaiaidiewbha.
- Ka jingriia ki ka long kumkawei ka lad ban risyiar
- Coturnix quail ki bun ka protein
- Ka jingriia ki ka long ka lad ban iohkhamkloi ka protein haba don ka jingduna ha ki jingbamba bun protein.



### KA JINGKHA PYLLENG

- Ki Japanese quail ki kha ki pyllengkibakhamrit (7-10 gm) bad ki kha bun tylli.
- Ki sdang ban kha naduh ka 6 taiew ka rta.
- Lada ka biangnadongshadong ki kha 250 tylli ne khambun ki pylleng ha ka shisnem.
- Ki shynrongpylleng ki stang bad kloii ban pait.
- Ki sdang ban kha bhahaba ki don 50 sngi ka rta.

### KA JINGSHNA IA KA SEM

- Ki kamra ki dei ban long kibasyaidbapyngngad bad ba lait na ka jingrung ka lyer.
- Iweisiyiar quail ba la heh idonkam 145 cm ka jakahapoh sem.

- Kim shnaskum ban kha pylleng, hynrei ki buhriehhapoh u skumbasiang.
- Lada kwah ban buh 2 kynhun, buhia ki ha ka semba dang thymmai.

### KA RUKOM SUMAR

- Ki long kibajem met bad donkam ban sumarbhaba ki don hapoh ka 2 taiew ka rta.
- Ka jingaijingsyaid ka shongkatkum ka rukom long jongki (behaviour).
- Ka Battery brooding haduh 3 taiew ka khambha ban ia ka ba ai jingsyaidhapohmadan, namar ki long kiba rit.
- Ki bari ha ing (domesticated) kisdang kha haba ki don 10-20 taiew ka rta.
- Pynshongkhaia u wei u shynrang bad 1 – 3 tylli ki kynthei ban iohia ki pyllengbabha.
- Lum ia ki pylleng ban pynpdemhadein 4 sngiba dep pynshongkha.
- Ki pylleng ban pynpdembuhia ki ha ka jingsyaidkaba 15.5<sup>0</sup>C bad ka jingsngemkaba 80%.

### KA RUKOM AI JINGSYAIID IA KIBA DANG RIT

- Ia ki badangritlah ban ai jingsyaid da ki commercial lane game-bird battery brooder.
- Iweidonkam 2-3 cm ka jaka ha ki dong ai bam bad 1 – 1.5 cm ha ki dong ai um.
- Pyntam ka rukom ai jingsyaidia ki coturnix quail haduhba kin da mihsner. Ka jingsyaidkababiang ka donkambhana ka bynta ki ba dang rit.
- Ka jingaijingsyaid ha ka por bas dang ka dei ban duna ban ia ka jingsyaidjong ka incubator (machine pynpdem).



### KA RUKOM BAN AI BAM

1. Ai ia u starter feed naduh 0 – 3 taiew
2. Ai ia u Grower feed naduh 4 – 5 taiew
3. Ai ia u Layer feed naduh 6 taiewshaneng.
4. Ki khun quail ki heh ki sankloi bad ka jingdonkamia ka protein bad amino acid ka bun bha ha kane ka por.
5. Ki Japanese quail ba la heh ki bam 14 – 15 gm ha ka shisngi.

### KI JINGPANG BAD KUMNO BAN IADA

- Lada kadon kano kano ka jingkyllakynsankynsan ha ka mariang ha ka por ba ki dang don hapoh 2 taiew ka ktahia ki.
- Lah ban ai ia ki dawai antibiotics ha kane ka rta da kabakhleh lang bad ka um ne u jingbam.
- Ymdonkam ban ai tika ia ki.

- *Aspergillus fumigatus* u pynpang pneumonia ia ki. Lah ban iada da kabakhlehia u calcium propionate @ 2kg/ton u jingbam.

## KA JINGRI IA KI HAN

### KI JINGMYNTOI NA KABA RI HAN

1. Ki han ki kha pyllengkham bun habanujor bad ki syiar.
2. Ki pylleng ki kham heh kumba 15 – 20 gm.
3. Kim da donkamia ka jingsumar, ki imbha da kaba ki bam naphang.
4. Ki bam ia ki sohkbaba hap, ki khniang, ki mattah, ki wieh, ki dohkha bar it bad kiweikiwei.
5. Haba ianujor, ki kham kha pyllengslem wat hadeinshisnemruh.
6. Kim donkam ka semkabapaka.
7. Ki long kibashaitbakhlain bad ki lah ban ialehpyrshahia kino kino ki jingpangruh.
8. Ki imbha wat ha ki rudwah, ki jakabasngem bad ki jakabatyrkhong.
9. 95 – 98% ki pylleng ki kha ha ka por mynstep.
10. Ki iahapbha ban ri bad ki dohkha bad kiweikiwei ki jingri ne jingthung (integrated farming system). Lada ri lang bad ki dohkha, ka painkhanajongki ka long kumiajingbamia ki dohkha (200 – 300 tylli ki han ha ka 1hectare kajinghejong ka jaka (wasteland). Lada thungkba bad ka rihan, ki iarap ban pynjemia ka khyndewnamarba ki iitjingbam bad puh da ka shyntur, kumjuhruh ki pyndunaia ki khniangba bam ia u kba bad pynsbohia ka jaka ha kajuh ka por.
11. Ki pynduhjaitia ki khniangbaju don ha u phan, ia ki puit, bad kiweikiwei. Ha ki jakabakynrei u wieh ne u liver fluke, ka jingdonjong ki ka pyndunaikine ki jaitwieh (2 – 6 tylli ki han/0.405 hectare ka jaka). Lah ban riia kin a ka bynta ban pyndunaia ki pyllengpyrjong (6 – 10 tylli ki han/0.405 hectare ka pung um).
12. Ki long kibastad bad lah ban hikaiia ki ba kin leitjngi hi sha pung bad wanphai hi ha ka por janmiet.

### KI JAIT HAN

#### 1. Khaki Campbell:

- Ki long kiba kha pyllengshibun
- Bad kawei ka kha 300 tam tylli ki pylleng ha ka shisnem.
- Ka jingkhiajong ki hankynthei ka long 2 – 2.2 kilo bad ki hanshynrang 2.2 – 2.4 kilo.
- Ka jinghejong ki pylleng ka long naduh 65 – 75 gramkawei.

#### 2. White Pekin:

- lakine la jurina ka bynta ka doh.
- Ki heh ki sankloi, kim da bam bun u jingbam bad ka doh jongki ka long kababha.



- Ha ka 42 taiew ka rta ki khia 2.2 – 2.5 kilo bad ka jinglahjongki ban pynkylla doh ia u jingbam ka long 1:2.3 sha ka 2.7 kilo.



**Dur: Khaki Campbell**



**Dur: White Pekin**

### KA JINGPYNPDEM PYLLENG

- Ka shim por 28 sngi ban long khun.
- Lada pyndonkam da ki korpynpdem ka jingsyaidkaba 37.5 – 37.2<sup>0</sup>C (99.5 – 99<sup>0</sup>F) ka long kababiang tam.
- Ki jingkdew ha u wet- bulb reading thermometer ka dei ban long 30 – 31 <sup>0</sup>C (86 – 88 <sup>0</sup>F) ha kaporbapynpdemnاده ka 1-25 sngi bad 32.7 – 33.8<sup>0</sup>C(90 – 92 <sup>0</sup>F) nاده ka 26 – 28 sngi.
- Ia ki pyllengsynreit da ka um syaidba la khlehdaishisienshisngi, nاده ka sngi baa r bapynpdemhaduh ka sngiba 25 bad ai ba kin pjahia ki kumbashitengkynta.
- Ia ka candling ne ka jingpeitia ki ba long khun la juleh ha ka sngikaba 7.
- Ia ki pyllengdei ban pynkylla man la lakynta.
- Kynriahia ki pylleng sha ka hatcher ha ka sngiba 25.

### KA RUKOM BAN PYNSYAIID( 0 – 4 taiew)

- Ka jingaijingsyaidia ki khunhan Khaki Campbell ka deihaduh 3 ne 4 taiew.
- Ka jingaijingsyaidia ki hanbarina ka bynta ka doh kum ki Pekin, ka dei 2 hauh 3 taiew.
- Ai 90 – 100 sq.cm ka jakaiweiikhunhanhapoh ka shangpynsyaid.
- Ka jingsyaidna ka bynta ka taiewbanyngkongkadei ban long 29 – 32 <sup>0</sup>C (85 – 90<sup>0</sup>F)bad pynhiariakane ka jingsyaid 3<sup>0</sup>C man la ka taiew tat haduhbakan da long 24<sup>0</sup>C (75<sup>0</sup>F) ha ka taiewkaba saw.
- Lah ban ai jingsyaidia ki ha ki wire floor, nemadanskum ne ki battery brooder. Ka wire floor kaba ka jinghehjong ka ka long 0.04m<sup>2</sup>(1/2 sq.ft)/ kawei ka han, ne ka madanbasiangskumkaba ka jingheh ka long 0.0093 m<sup>2</sup> (1 sq.ft)/iakawei ka han ka lahbianghaduhba kin da dap 3 taiew ka rta.
- Ka um hapoh ki dong ai um ka dei ban long 5 – 7.5 cm ne 2 – 3 inshi ka jingjylliew, tang ban shubiangba kin dih um ym ban jngi.

### KA RUKOM BAN RI (15 – 16 TAIEW)

- Ia ki khunhanlah ban ri da ka intensive ne semi intensive ne free range.
- Lada rihapohsem (intensive) ai jaka 0.279m<sup>2</sup> (3sq.ft) iaiweihaduh 16 taiew ka rta.
- Lada ri da ka semi intensive, ai jaka 0.186 – 0.279 m<sup>2</sup> (2 ½ - 3 sq.ft) iaiweihapohsem bad 0.929 – 1.394 m<sup>2</sup> (10 – 15 sq.ft) ha run iaiweihaduhba kin da dap 16 rta ka taiew. Lah banpyllaitia ki khunhanhapoh run hadeinba ki lah dap 3 – 4 taiew ka rta, hynrei ka shongkatkum kajinglong ka suinbneng.
- Ka jingjylliew ka um hapoh ki dong ai um ka dei ban long 12.5 – 15 cm ne 2 – 3 inshi.

- Ha ka range system lah ban rihaduh 1000 tylli ki han (1 acre).

### IA KIBA LA HEH (17 TAIEW SHANENG)

- Lada ri da ka intensive system ai jaka 0.371 – 0.465 m<sup>2</sup> (4 – 5 sq.ft) iakawei ka han, ha ka semi intensive ai jaka 0.279m<sup>2</sup> 93 sq.ft) hapohsem bad 0.929 – 1.394 m<sup>2</sup> ( 10 – 15 sq.ft) ha run.
- Ai jaka ha dong ai bam 10 – 12.5 cm (4 – 5 inshi) iakawei ka han ha ka V shaped feeder, bad ha hopper ai jaka 5 – 7.5 cm (2 – 3 inshi) iakawei.
- Ki sdang kha pyllenghaba ki don 16 – 18 taiew ka rta. Mang kawei ka shang kha pyllengkaba 30x30x45 cm na ka bynta 3 tylli ki han. Lada kwah ban pynkharoibuhuwei u hanshynrangna ka bynta 6 – 7 tylli ki hankynthei.
- Ka jingdonkamjingshai ka long 14 – 16 kynta ha ka shisngi.
- Ha ka range system, lah ban ri 1000 tylli ha ka shi acre ka jaka.

### KA SEM

- Kim da donkam ka sembapaka.
- Ka sem ka dei ban rkhiang, bapynngad bad bymloh rung khnai.
- Ka tnumlah ban shna da ka tin tap shiliang, ne gable ne half round.
- Lah ban siangmadan da ka dewbilat ne wire floor.
- Ka run ka dei ban sharing malu mala ban suk ka pynkhuid.
- Kim da donkam ka um ban jngihynrei tang ban shupynngamia ka khlieh.
- Ha ka semi intensive system, ka jingmangia ka semna ka run ka long 1/4 : 3/4 .

### KA RUKOM AI BAM

- Ki sngewtynnadia u wet mash ban ia u dry mash.
- Ki bam katbaioh.
- Khmihbniahbakimdei ban bam jingbamkhlem ka um dih.
- Hapoh ka 8 taiew ki dei ban iohjingbamkhlempud bad hadeinlah ban ai bam tang arsien ha ka shisngi.
- Ki khaki campbell ki bam 12.5 kilo u jingbamhaduh 20 taiew ka rta, hadein pat 120 gramkawei ka han ha ka shisngi, kane ka shongkatkum ka rukom kha pylleng bad ka jingbun ki jhurjyrngam.

### KA JINGAI TIKA

Sl no	Rta	Jait tika	Ka mang	Kumno ban ai
1	3 – 4 taiew	Duck cholera	1 ML	S/C
2	Hadeinshubnairiang ka tika ba ai khatduh	Duck cholera	2 ML	S/C
3	8- 12 taiew	Duck Plague	1 ML	S/C