

AGANCHENGANI

Mandencha nangchongmotgipa protein, minerals, vitamins ko do.chi aro do.o be.enoniko bang.en man.na ama. Dingtangmancha bitchirangko bang.e chi.gipa do.orang, dal.ninga aro cha.aniko be.en pil.atna man.ani chugipa ong.a. Farm ni dal.anio pangchake, bitchi-chi.gipa do.o/layer an nokdangni janggi tangani chol ong.a ba uamangni nokdang dakanio tangka man.dapatani chol mingsa ong.a aro songni-nokni manderangna tangka-paisa kamaiani cholba ong.a. do.o ki.i a.sal namen nambegipa ong.a aro uko ge.a gamaniko sildapatna jakkaltoka

India-o do.o bitchi production ba batanggimin bilsi kolatchi ni gisepo namen tang.doaha ine nikna man.a. Namgipa jatni do.orang, cha.chak ringchakanirang, tika/vaccinerang aro samrangko da.alo man.na altubeaha. Technical aro professional gita do.o jilani gimin manderangna aganku.patie on.anirang da.alo komijaha. Nirok simsakbate jilani da.o nambataha aro indake do.oni sabisi man.anirang aro sianirang komibataha. Bang.a training on.gipa skulrangan, da.alo bang.a manderangna trainingko on.engaha. Namgipa do.o/layer ni bang.ani 1961 bilsio 35 million onga.oni, 1996 -o 115 million ong.skaaha. Do.chiba apsan somoio 2,340 million oni 34380 million ong.skaaha.^{8th} Plan Period o do.chini baridapani 6.83 % ong.skaaha. (1992-97). Mande sakprakna da.alo rong 41 do.chiko cha.na man.aha indiba ICMR ni aganani gitade mande sakprak ,bilsiprako , rong182 do.chiko cha.na nangskaachim. Central / State Government da.alo do.o/do.chi man.aniko baridapatna gita entrepreneurs na dingtang dingtang bimango dakchakaniko on.enga. Bitchina do.o jilani (Layer Farming) ko National Policy o da.alo mongsongbate ra.enga maina uko namdapatna chol bang.bata.

Do.o jilani ba Poultry sector an Meghalayao ge.sa dal.roroenggipa kam/business ong.enga jekon ka.mao mesokatgipa manderang dakenga ;

- Game cha.giparang
- Gisiko nanggipa sakprakprak ba
- Entrepreneurs,
- SHG & Co-operative Societies

DO.ONI ROKOMRANG JERANGKON MEGHALAYAO JILNA NAMBEA

- **Layer Birds** – Ia rokomni do.oko bitchi chi.atna gita jila. Do.oni jatrang jekai BV- 380 (do.chi a.mangni rong), INDBRO, BV300 (do.chi gipok) iarang an.chingni biapo jilna nambata.
- **Broiler** – Ia rokomni do.orangko be.en cha.na jila. Meghalaya-o jilna namgipa jatni do.orangara Vencobb – 400, Rong gnanggipa Broiler ong.a
- **Dual purpose Breed/ Low Input Birds** – Ia rokomni do.orangko minggninan i.e do.china aro be.en cha.na jila. Kuroilers, Giriraja , Rainbow Rooster jatni do.orangkon do.china aro be.en-na jila.

LAYER/ DO.CHINA JILGIPA

1. BV Strains

- BV- 380 (Do.chi a.mangni rong)
- BV-300 (Do.chi gipok)

BV380 ara chocolate ni rong daka, a.mangni rong

- Bimani jrimani:-
- Anti 21-o – 1.5 kg
- Anti 72 o – 1.85 kg
- Do.chi badita chi.a = rong 272 bilsio
- Biap nangani = 3sq ft. mangprakna



INDBRO Brown Layers

- Indbro Brown layer rong 200 – 300 mang a.mangni rong do.chirangko chi.a.
- Rong gnanggipa do.biparangko, local do.o gita dake cha.togipa be.enko cha.na jilna man.a.
- Dal.dalgipa a.mangni rong do.bimarangko nolo chipe ba wateba jilna man.aia.



BROILER

Strain

- Vencobb – 400
- Sal 52-56 on kg 2 – 2.5 Kg ong.a.
- Dana 5-6 Kg ko palani somoiona nanga.



DUAL PURPOSE

KUROILER

- Bitchi chi.atna aro be.en cha.na gita jila.

- Babilisini galsparangko on.e ia do.oko dal.atna man.aia.
- Rong 150 bitchirangko bilsisao chi.a.
- Be.enni jrima 3.5 kg (do.bipa) & 2.5 Kg (do.bima)



RAINBOW ROOSTER

- Ian rong dingtang dingtangni do.o ong.a. la jatni do.oko bitchina aro be.en cha.na gita jila aro ia do.oni jatara noksamo wate jilna ba local do.oko jila gita jilna nama.
- Rainbow Rooster ara ta.raken dal.ninga aro sabisirangko altue man.ja.



JILANI ROKOMRANG/SYSTEM OF REARING

DEEP LITTER

- Iano do.orangko chipkete, a.pao litter (bol ratani biginchi) ko ane jila.
- Ia systemara broiler aro bitchina jilgipa do.orangko jilna nama.
- Do.nokni sambengo, do.orangko dikdiksana wate donna man.na gita, bera kae jilna man.ode nama.



Fig. Deep Litter System of Rearing

NOKSAMO WATE JILANI/BACKYARD FARMING

- Do.orangko noksamo watbrange jilenba, game cha.giparang tangka paisa man.dapchina miksunge jilgipa ong.a.
- Ia system ara bitchina aro be.enna miksunge jilgipa jekai kuroiler, vanaraja, rainbow rooster and local do.orangko jilna nama.



Backyard System of Rearing

DO.NOL RIKE JILANI/ENCLOSURE

- Ia system-o net-rangko on.e do.nolko rika aro iako ganchang dake songeba donna man.a ba iana agreba, ia do.nolko nokkingrango kadingdeeba donna mana.
- Cha.chak ringchakanirangko do.nolni sambengo a.palchipakni kadee dona indiba chi ringgipa nipple nade pipe ko do.nol gitan ba do.nol kosak gita salbana nanga.
- Automatic cha.ani on.ani aro do.chi chimonggiparangko iano tekna gitaba man.a. Do.o ki.irangko do.nol nakkima tray rango ra.chakna gita man.a ba do.nol ka.maon a.kol cho.eba chimongna man.a ba nok rikani bewalni kri nangnika gita do.ki ko chimongna man.a.

SLATS ARO BOLGINCHIKO ON.E DO.NOL RIKANI/ SLATTER CUM LITTER

- Ia system ko mongsongbate be.en cha.na jilgipa do.o jatni bitchiko bamatna (hatching) jilgipa do.orangko jilna jakkalbata.
- Iano do.nolni adha bak-o plasticni slats ko ane aro adha bak-o bol biginchirangko ane do.nolko rika.

- Indinde 60% do.nolni a.pako slats anemung, bangki-kode bol biginchiko anskaa.
- Cha.chak ringchakanirangkode slats angipaoba aro bolginchi angipaoba donna nanga.
- Bitchi chi.chakani gringrangkode nest boxes) kode bolginchi angipao donskaa.

GANCHANG DAKE DO.NOL RIKANI/HIGH RAISED HOUSES

- Indake nok rikgipao balwa name jokrurana man.a.
- Samtangtang berako wa.se wate (mesh) ba net-ko on.e rika . Do.nolni chuani/height 6-7 ft ongna nanga aro krong de pucca ong.na nanga.
- Krong ge.saoni ge.saona chel.a 10 feet ong.na nanga. 2 ft apalgipa puccani a.pa (floor) ko krongni kosako rikna nanga.

BIAP BASEANI/ SITE SELECTION

- Farm ko daknasigipa biap aro design State Pollution Control Board nangnika gita ong.na nanga.
- Chi ringna namgipa chi-ni ja.pangoni, farm 100 metre-na bate chel.ao ong.na nangja aro gipin farm oni 500 metres mang chel.ao ong.na nanga.
- Farm-ni samtangtango 8ft chue boundary fencing ba wallko, napna aro ong.katna cholguga done kana nanga.
- Namgija chirangko wate galna nalako name tarina man.na nanga..
- Chi jokaniko farmni ning.oba ba a.paloba champengani dongna nangja.
- A.timbo dakgipa biap, jeon mamung chi bana reani ba moila-chi skongani dongja, indakgipa biapo farmko dakna nanga.
- Ro.gipa bakko Salaram-saliram dake done ba salni teng.ani tongtong do.nolo ga.akjana gita hisape, ding.gipa biaprango do.nolko rikna nanga. Sin.gipa biaprangode ro.gipa do.nolni bak Salgro-salgipeng o ong.skana nanga.
- Do.nolni ro.an, do.o badita mang donga, mai dakgipa do.oko jilenga aro mai system-o jilenga, uno pangchaka. Ammoniani chimonge donganiko gelna gita, apalanide 9m ba 30 ft na batna nangja.
- Altuae re.na dona man.gipa biap ong.na nanga aro altuae nolko aro do.orangko rongtalatna man.gipa ong.na nanga.
- Apsan dakgipa do.nolni chel.grika 30 ft ong.na nanga aro gipin gipin dakgipa do.nolni chel.grikani 100 ft ong.na nanga.
- Do.nol ning.achi chi chipangna man.jana gita, do.nolni krong (foundation) rang namna nanga. do.nolni foundation pucca ong.na nanga aro 1-1.5 ft a.an ni ning.achi aro 1-1.5 ft a.an level kosako ong.na nanga.
- Pakmarang aro nokkingrang, agre sin.a ding.ako champenggipa ong.na nanga aro mese napna man.gijagipa ong.na nanga. Chipu napna man.jana gita samtangtango side –walk dongna nanga. (rong.te chonchongiparangko farm ni samtangtango ane tarina nanga)
- Balwa name jokrurana man.na gita Ceyling kraa gita chuna nanga.
- Nokni side ni chuani a.aoni 6-7 ft ong.na nanga aro nokking bijangchini chuani 10-12 ft a.aoni ong.na nanga.
- Nokrangko rikon indake rikna nanga je ka.singipa balwarang do.bisbarangko dongipaona balangchenge, sarong aro do.bima dongipa nolona sokanggen. Indake rikaniara do.bima dongipaoni do.bisbarangona sabisi batanganiko champenga.

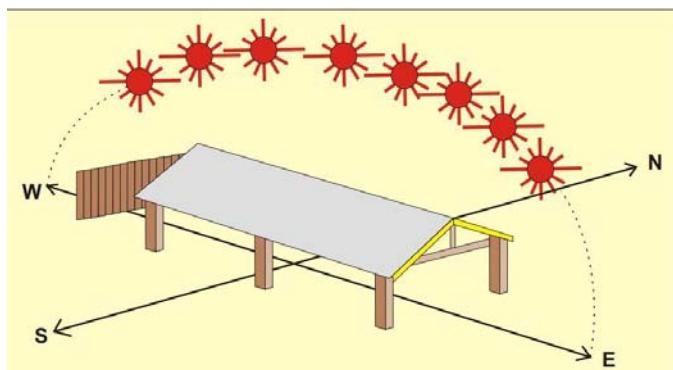


Fig. ro.gipa do.nolni bak saliram-salarmchi mikkanga.

NOL RIKANI ARO DO.OKO DONANI /SHED CONSTRUCTION AND HOUSING

- **A.pa-** A.pa raktipa ong.na nanga. A.pa ko, cement-rong.te on.e ba cement-ita on.e ba rong.teni slab ko cement kosako aneba rikna man.a. A.pako a.aoni komibeoba 25 cm kosake rikna nanga.
- **Slat on.e** rikgipao, slats ara 2.5 cm apalgipa ong.na nanga aro slats ko ge.saoni ge.gipinona 3cm chel.grike done anna nanga. Slats ko ro.dingding dake anna nanga. Slat angipa a.pa-ra do.nolni a.pa-ni 100 cm kosako ong.na nanga.

FLOOR SPACE RECOMMENDATION

AGE WEEKS	TYPE OF REARING	FEMALES			MALES		
		DL SQ. FT	SLAT SQ. FT	CAGE SQ. INCHES	DL SQ. FT	SLAT SQ. FT	CAGE SQ. INCHES
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

- **Pakma** – Do.nolni ka.magipa bakni pakma chuani bak 3 ni bak1 de pucca ong.na nanga
- Kosakgipa bak 3 ni bak 2 de (two-third) wire-netting dake tarina nanga. Net ni eng.an 12 x 12mm ong.na nanga. do.nolko chonchone, jangchio rama done, kuturi tarina nangode, bak dakgipa pakmako ita-pucca 30 cm chue on.e, kosako wire-mesh on.e tarina nanga.
- **Nokking-** *Do.nolni nokkingko chapra dake ba jangchio chueba rikna man.a.* Do.nolni apala 10 m batode nokking jangchiko chue, ventilation on.e rikna man.a. Nokkingna corrugated asbestos cement sheets, aluminium sheets, galvanized steel sheets, asphalted corrugated or plain light roofing materials or tiles corrugated ba am.pangko jakkalna man.a. Am.pangko nokking pinna jakkalode, uni chatani 15 cm ong.na nanga aro mikka selna nangja. Nokkingni a.palni bak (overhang)-ko mikka balsatjana gita 1m apale on.na nanga.
- **Do.garang** - Samtangtangni do.garang 1.2 m apala and 1.5 m chuna nanga. Do.nol jangchio rama dongode, do.gani apala 1.2 m aro chua 2 m ong.na nanga aro kuturirangni do.gani apala 0.6 m and chua 1.8 m ong.na nanga. Do.gani ka.magipa bak 30 cm a.pani kosako ong.na nanga aro do.gaba ka.magipade ronggimik/solid and the kosakgipade wire netted ong.na nanga.
- **Sambengni rama/ Side walk** - meserangni aro chipurangni napaniko champengna gita, nolni samtangtangchi rama tarie, ua ramakoba 1.5ft chue pakma ba slabchi kadule tarina man.ode nama.

BALWA JOKANI/ SYSTEMS OF VENTILATION

- Bol biginchiko ane do.oko jilengon, bol biginchi ratdaldalgipani ong.na nanga ba megap ba narikel bigil ratchemchem giminko jakkaloba, gitalgipa ong.na nanga..
- Do.bisa roramjana gita tarigimin, ‘chick guard’ ba ba.gipa thin sheet ong.na nanga ba cardboardko jakkalode, uni chuani 45 cm ong.na nanga. Aro chick guard ni ro.anide badita mang do.bisa donga uno pangchaka. Uno noksik dake dongjana gita guard ko ‘brooder’ni kokkima dawile arrange ka.na nanga. ‘Brooder’ ara electrical ba gas chi teng.atgipa ong.na man.a.

Do.bisani cha.chakgiparangara, sronggipa,(linear), bo.romgipa (circular) ba kadena man.gipa (hanging) ong.a. Ringchakanide ope ringna man.gipa (nipple type) ba pipe tekkame chi jokdogipa (fountain type) ba ong.na man.aia.

DEEP LITTER SYSTEM JILENGON, LAYERNI DO.NOL NING.AO TEKNA NANGGIPARANG

- **Perches :** Do.o gakate rona gita, tarion, solgimin bol 5 x 10cm ro.gipako aro bolni rikingara rectangular ong.gipako ba wa.a 5cm ong.e dal.giparangko, do.nol jangchio songdoe donna man.a. Ge.sa perch oni ge.gipin perch ona 35 cm chel.grikna nanga aro uarangko name mangrakate songna nanga. Perch ko pakmaoni 25cm chel.e songna nanga aro 55-75 cm chuaos date fix ka.na nanga. Perch ni space mangprakna 15cm hisape tarina nanga ba do.o dal.giparangnade mangprakna 25cm hisape donode nama.
- **Bitchi chi.chakram do.gring/Nest box:** Do.o mang 5 prakna ge.sa bitchi chi.chakramko tarina nanga ba 1m² ong.gipa bitchi chi.chakramko do.o mang 120 na tarioba namaia. Bitchi chi.chakramni tu.a 8cm mang ong.na nanga, 18cm mang dal.e do.ga dake tarina nanga



Fig. Perches



Fig. Nest Box

SIMSAK-NIROKANI / CARE AND MANAGEMENT

- Do.o gitchamrangko do.noloniko ra.ongkatani ja.manan, do.nolo sam satna nanga.
- Jitna man.gipa bostu gimikkon, aro cha.spa danarangko gimikkon ra.gale donna nanga.
- Meserang ba burungni do.orang dongode, uarangko so.ote galna nanga.
- Do.o ki.i ma.skapgiparangko, bol biginchi angiparangko, do.o kimil ma.skapgiparangko guangsring ba moila gimikkon brush chi natsiksike do.nolko rongtalatna nanga.
- Samtangtangni pilak jabolrangko so.e galna nanga aro burung o.na nanga.
- Wa.al so.gipa slaiko jakkale, wire meshni moilarangko, a.pa ba pakma bretgipako, do.o katcharangko aro a.pa gimikkon so.srakna nanga.
- Cha.chak ringchakanirangko, chi ra.chakgiparangko, fan-rangko, pakmarangko, a.parangko, ta.rake chi jokgipa pipa ba jet sprayer ko jakkale su.galna nanga.
- A.pako su.galna skang ‘saturated washing soda’ ko on.e kanta 24 na dim.e donchengna nanga, ja.mansa chi-ko sate galenba, chi ruprakprake su.galna nanga
- Do.nol nokningko sam sate rongtalatna nanga.

- Ja.manu chun chi nokning gimikkon rong nongna nanga. (chun 2kg/100sq ft, copper sulphate 3% and Formalin 5%ko brine paste tarie nongna nanga)
- Ja.manu, do.nolko ran.ate donbo.
- Uni ja.mande, saturated bleaching powder / vinegar (1 ml/litre of water) / 35% H₂O₂, (15 ml/l) ko walsana sate dontaibo.
- Pringo chi bilake jokgipa pipe ko sale nolko su.galtaibo.
- Do.nolko name chipna man.ode, do.bisa ra.bana skang nolko fumigate ka.na man.ode nama. **Fumigation** - Formaldehyde gasko jakkale fumigate ka.na man.a. Formaldehyde ko 40 ml- formalin ko 20 g- potassium permanganate baksu brine tarina man.a. Fumigationara ran.gipa atmospherena bate chijimgipa atmosphereo name kam ka.bata. Uni gimin do.nolni pakmarangko aro a.parangko fumigate ka.na skang chi satchengna man.ode nambata. Pakma, a.pa be.gipa gimikkon tapenba aro kelki gimikkon, fumigate ka.a matchotkujana kingking chipe donna nanga.(40 hours). Formalin ko potassium permanganate ni kosako rudape, chel.batgipa kulturini bak-oni a.bachengna man.a.
- Do.nolko fumigate ka.ani ja.manu, kanta 24 nolko chipe donenba kelkirangko opangpange, balwa wate galna nanga.
- Fumigation dakna man.jaode, a.pa, pakma, gimikon 3ft ona kingking, Formalin (5%) chi-chi nonge kanta 6 rangna donskana nanga.
- Brooder ni light namama namja check ka.e, chick guard, do.bisani cha.chak ringchakani gimikkon do.bisa ra.bana skang name arrange ka.e donna nanga.
- Aro light switch rang namama namja ukoba check ka.na nanga.
- Kosako janapgipa pilak dakna nangniko do.bisa ra.bana sal 10-15 skang dakna nanga.
- Chi piperangko wate nienba, maiba sam brinarang ba moilarang chi baksu jokama jokbajaenga uarangko nina nanga.
- Do.bisa sokbana sal 2 skang, bol biginchiko 3-4 inches chate ansona nanga aro litter ara gitalgipa ong.na nanga.
- Wire mesh dakgipa pakmarangko chalja bosta ba tarpaulin chi porda dake pengna nanga.
- Kanta 36 na skang do.nolko ding.atna man.ode nama jedakode bol biginchipangko 28 to 31°C ona ding.atna man.gen. Apsandake pucca a.pakoba 25 - 27°C ona ding.atna man.ode nama.
- Do.bisa sokbana kanta 6-8 skangmangan brooder ni lightrangko teng.ate donsona nanga.
- Chi opgipa pipe-rang do.bisani mikron tongtong, bo.romgipa ringchakanirang pilakan tiktak chuaon a.pao ong.ama ong.ja nina nanga. Aro pipe nipple gita chi jokama jokja ukoba nina nanga.
- Pipe opgipa/ nipple ni ka.mao lekkarangko ane, danarangko lekkani paper rango on.e, do.bisarangko attract ka.na nanga.
- Katcha/cage dake do.orangko dongenchimode, sal 7 na chu.ongna gita, katcha ba cage ni ka.mao lekkako anna nanga aro salprak kingprak dake lekkarangko kike galna nanga.

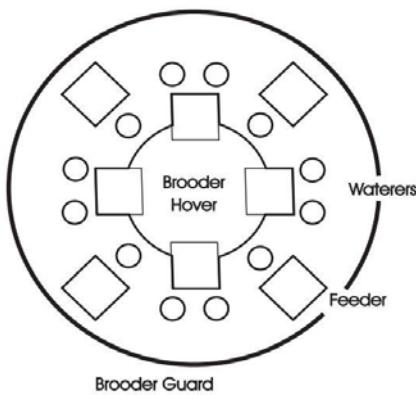
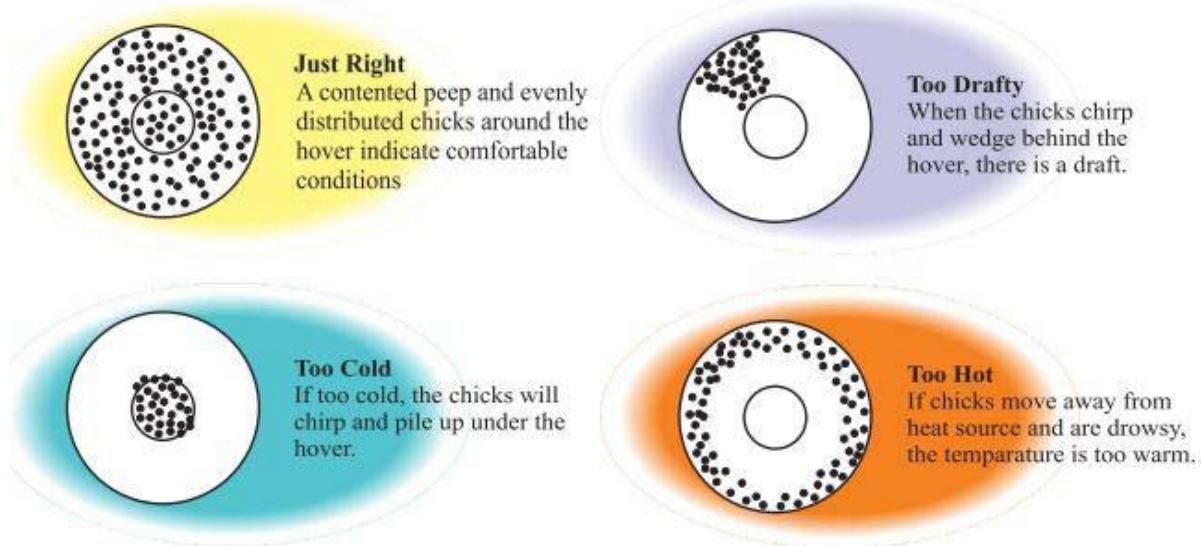


Fig. Broodero maikai cha.chak ringchakanirangko arrange ka.a uko noksao mesokenga.

BROODER-O DO.BISANA SIMSAKANI (0-8 WEEKS)

- Do.bisarang sokbaani bakan uarangko brooder-on, chi donram sambaona ka.sine simsake donatna nanga.
- Do.bisarang ra.bamitingo chi man.jae, be.en ran.ani gimin, chi name ringama ringja uko name nichengna nanga.
- Ra.baani sal 2 nade, chi bo.oma- (25° to 30°C), electrolytes aro Vitamin AD,EC bringimin aro nangode antibiotics bringimin chi ko on.na nanga.
- Bnekatgimin me.rakku ba bnekatgimin danako, do.bisarang danako name uina gita, lekkao anbrake on.na nanga.
- Do.bisarang roramjana gita chick guards ko anti 2 na kingkingde kadule donna nanga.
- Komibeoba 45 sq cm biapko mangprakna brooder ning.o nanga. Brooder ni ding.ani 35°C oni a.bachenge, ka.sinsin antiprako 2.8°C komiatna nanga (anti 4-on).
- Do.bisani cha.chakaniko uarangni cha.na sokna gita dake adjust ka.na nanga.
- Dana anbrake on.gipa lekkarangko salantian kike galenba, chick guard ra.gale galkujana kingking, gitalko ane on.na nanga aro chick guard ko sal 7-8 ni ja.man ra.gale galna nanga.
- Indake chick guard ra.galahao, do.bisarang an.tangtang nolo roramna man.na gita, bol biginchirangko apalbate ane on.na nanga.
- Indake chonchongipa ringchak-cha.chakanirangko ka.sinsin ra.gale gale, dal.kalgipa ringchak-cha.chakanirangko donskana nanga.
- Ringchakanirangko skanggipa anti 2 nade salantian su.galna nanga. 3rd gipa antionide antio changsa su.galoba chu.onga.

DIAGRAM OF CHICKS DISTRIBUTION UNDER BROODER



DAL.DROBAENGGIPA DO.ORANGNMA SIMSAKANI: (9-20 WEEKS)

- Anti 9 ong.ahaode, do.bisarangko uamangna nol rikgipa (Grower house) ona jitatskana nanga.
- Do.orang nom.jana gita, uarangko gipin nolona jitatengon attam ba walosa jitatna nanga. Sam gnanggipa chi-ko ba anti-stress samrangko, nol dingtangona jitna sal 2 skang aro ja.man on.na nanga.
- Grower nok ara balwa name jokruruna man.gipa ong.na nanga aro uano cha.chak-ringchakanirangko donnaba chu.onga gita biap dongna nanga.
- Do.orangna grower ni danakosa on.na nanga.
- Cha.chak –ringchakanirangkode do.orangni bang.ani kri nanga gita on.na man.a. Dana aro chi ga.akniko man.adipet champengna nanga.

- Nanggenchimode do.orangni ku.sikko anti 16 na skang rate galna man.a. Namgipa cha.aniko on.skabo. Cha.aniko cha.chakanio gape donbo aro gital gital rongtala chi-ko salantian salo changgni dake on.bo.
- Do.oni jrimaniko anti 8, 12, 16 and 20 o tobo jedakode do.o dal.roroama dal.rorojaenga uina man.gen.

LIGHT ON.ANI SOMOI

Bilsi	Badita ruute light ko nanga
Anti 0 – 8	Salni teng.anian chu.ongaia. Artificial lighting-ko nangja
Anti 8 – 16	Kanta 12 , kanta 12 salni jatenagko man.jaode bulb rangko so.skabo.
Anti 16 ba una batgipa	Artificial light-ko adha kantaprakna antiprako bariatbo. kanta 16 ong.kujana kingking. Indake kanta 16 –na light ko on.bo

BITCHI CHI.GIPA DO.ORANGNA SIMSAKANI:

- Do.bimako donram nolona jit-skaboha.
- Do.bimako bitchi chi.na skangan uarangko donchakgipa nol (Layer house) ona jitna nanga.
- Jitna skang layer house ni jatengani, light bulbs, balwa jokruraani (ventilation), nol, litter gimikan namama namja, uarangko nichengbo.
- Do.orangko attam ka.sinachipaksa ba walosa jitna nanga..
- Jitna antisa skangde do.orangna mamung vaccinekoba on.na nangja, okni jo.ongni samkoba on.na nangja aro do.oni jrimaniko ton a nangja

BOL BIGINCHI BA LITTER-KO MANAGE KA.ANI.

- Namgipa aro gitalgipa bol biginchiko (litter material) jakkalna nanga.
- Litter-ko ran.e rakkina gita, salo chang 2 dake cho.bilna nanga.
- Bitchi kolani ja.manosa litter-ko cho.bilna nanga.
- Litter sosie tom.kaode, uko bnekatna chamos dakgipako jakkale, cho.bilna nanga.
- Name manage ka.gipa litter –o 25-30% moisture san dongaigen. Litter ko jakpao ra.e, uko jakkepon litterni sosia ba ran.ako ma.sia. Jakkepako kulion, ran.gipa litter-de gragra dake ga.akaigen indiba sosigipa litter-de tom.kagen.
- Chu.onga gita do.orangna biapko on.bo jedakode litter agre sosijawa.
- Hydrated lime @ 1kg or superphosphate of lime @ 0.75kg per sq.m ko sosigipa litterna jakkalna nanga.
- Chi sipangjana gita do.nolni a.pako, a.an level oni on.tisa 0.3 to 0.5m mang chue tarina nanga.
- Ning.an i nokkingko mikka seljana gita name tarina nanga.
- Selgipa ringchakanirangko jakkalna nangja aro ringchakanirangko, litter sosijana gita, dingtang dingtang biapo jite donna nanga. Sosigipa litter-ni pal ran.gipa litter ko anskana man.ode nama.
- Litter agre sosijana gita, ventilation namna nanga.

BIPA ROATANI BEWALRANG/ METHODS OF MATING

- **Pen mating** – Jensalo mangsa bipa nolon bimako pal ra.a, ukon pen-mating ba nolo bipa roatani ine agana. Mangsa bipakon mang 10-12 bimarangna jakkalna man.a.
- **Flock mating** – Bang.a biparang aro bimarangko apsan nolo chipe dona aro indake flock-mating ba bang.ako pal ra.atna man.a. Bitchina dongipa bima mang 10-12 na, mangsa bipako rakkioide aro be.en cha.na jilgipa bima mang 8-10 baksa, bipa mangsako rakkioide, uarangni fertility nambata.
- **Stud mating** – Ia bewalo pal ra.atode, bipako nol chonao chipe done, bimako pal ra.na bipaona rimbaskaa. Ia bewalo bipa roatora, bipako name jakkalna man.a indiba kam bang.skaa. Iano nambatgipa bipako pal on.na jakkala.
- **Shift mating** – Ia bewalora, bipako ruuta somoina bimarang baksa chipe donenba, ja.manode uko gipin nolona jitskaa aro gipin bipako ua nolona ra.baska. Indake bipako jitrikrike jakkala.

CHA.ANI ON.ANI/ FEEDING MANAGEMENT

Danani rokomrang :

- Mash feed: Dana/feed tarigipa bosturangko bnekate, brinenba ia cha.an/danako taria. Iako tarina altubata aro korosba komia.
- Pellet feed: Ia danakora mash feed ko ding.ate, sikprete ba tom.e pellet taria. Ding.atanichi danao donggipa jo.ongrangko (microorganisms and anti-nutritional factors-ko) nosto ka.enba danani digestibility ba digest ka.na man.aniko nambatata. Indake danako on.genchimode, danani waste(galani) ong.ani komia.
- Crumbles: pellets ko pe.taiskae iakora taria. Ia danako tarianiara mash aro pellet ko tariana bate koros ong.bata.

Do.bima bitchi chi.gipana na cha.ani on.ani(1st week to 24th week)

Sl. No	Bilsi	Dana-ni rokom	Do.o mangprakni ni jrimani salprako
1.	1 st gipa anti	Chick Feed	15 gms
2.	2 nd gipa anti	-do-	25 gms
3.	3 rd gipa anti	-do-	35 gms
4.	4 th gipa anti	-do-	40 gms
5.	5 th gipa anti	-do-	43 gms
6.	6 th gipa anti	-do-	46 gms
7.	7 th gipa anti	-do-	49 gms
8.	8 th gipa anti	-do-	52 gms
9.	9 th gipa anti	Grower Feed	55 gms
10.	10 th gipa anti	-do-	59 gms
11.	11 th gipa anti	-do-	62 gms
12.	12 th gipa anti	-do-	65 gms
13.	13 th gipa anti	-do-	68 gms
14.	14 th gipa anti	-do-	71 gms

15.	15 th gipa anti	-do-	74 gms
16.	16 th gipa anti	-do-	77 gms
17.	17 th gipa anti	-do-	80 gms
18.	18 th gipa anti	-do-	85 gms
19.	19 th gipa anti	Layer Feed	90 gms
20.	20 th gipa anti	-do-	95 gms
21.	21 st gipa anti	-do-	108 gms
22.	22 nd gipa anti	-do-	116 gms
23.	23 rd gipa anti	-do-	120 gms

DO.BIMAKO TIKA SU.NA DONGIMIN SOMOI / LAYER VACCINATION SCHEDULE

Sl no	Bilsi	Vaccine-ni bimung	Dose	Bano su.a
1	Pe.daldal	MAREK VACCINE	0.2 ML	S/C (bigilo)
2	5-7 TH sal	LASOTA VACCINE	1 DROP	I/O I/N (mikrono ba gingtingo rudapa)
3	14 TH sal	IBD VACCINE	1 DROP	DO
4	28 TH sal	LASOTA VACCINE	Dut powdermung brine	D/w (chi-o)
5	35 th sal	IBD VACCINE	DO	D/W (chi-o)
6	7 TH anti	Fowl pox	0.2 ml	i/m (muscle-o)
7	8 th anti	R2B VACCINE	0.5 ml	i/m (muscle-o)
8	11 th anti	Kusik ratani	½ of upper &lower beak for female	kosakgipa kusikni ¼ ko
9	13 th anti	Fowl cholera vaccine	0.5 ml	gitok kosakni bigilo (s/c)
10	20 th	Lasota booster	Dut baksa	Pring 10 AM o nambata

Deworming: ok-ni jo.ongni samko ja 3 prako, ja 1-2 onin a.bachenge on.na nanga.



Fig. mikron-o tikka rudapenga



Fig. muscle-o tikka su.eng.

PALNA BROILER JILANI/COMMERCIAL BROILER FARMING

Broiler do.ora, bima ba bipaba, 38-40 gms oni 1kg 700gms ona anti 6 ni gisepo dal.na man.gipa, cha.na be.en nom.gipa ong.a. Do.o be.enko da.ode city, town, songadam gimikon cha.aiahani gimin, broiler jilanian, Poultry Industry-ni, da.alo ta.rakbate dal.rorobaenggipa bak ong.a. Adita bilsirangni gisepon, do.o jilaniara, noksamo watbrange jilaoni, ta.rakbate dal.baenggipa segment ong.skaaha. Broiler jilaoniko bang.bate lapko man.na amna gita, ia do.oko jilani gimin jekai do.oni jat, cha.ani on.ani, nirok simsakani etc ko talbate uianiara nangchongmotgipa ong.a.

Be.en production na jilgipa broilerni jatrang:

1. Commercial Broiler Breed:
 - a. Colour broiler.
 - b. Vencobb
2. Dual Purpose breed/ Minggni kamnan jilgipa do.oni jat
 - a. Red Vanaraja
 - b. Kuroiler Dual
 - c. Rainbow rooster

COMMERCIAL BROILER KO DONCHAKNA NOK RIKANI ARO UARANGKO SIMSAK –NIROKANI:

Broiler farming-o bang.batgipa do.oni dal.aniko man.na amna gita, dongtogipa nok aro do.o dal.an i gadangni kri nolko apale rikna man.gipa biapan nangchongmotgipa ong.a Ka.mao mesokatgipa parameter- rangan nambate nok rikaniko dakna aro simsak-nirokna nanggipa ong.a.

BIAP BASEANI / SELECTION OF SITE:

- Biap chu.onga gita dongna nanga.
- Rongtalgi chi -ko chu.onga gita man.gipa biap ong.na nanga.
- Chi skonge donganiko champengna gita a .timbo dakgipa biap ong.na nanga.
- Mande song-dongram biaponi chel.kalao ong.na nanga.
- Altue re.runa man.na gita, rama-jal.ang donggipa biap ong.na nanga.
- Electricity donggipa biap ong.na nanga.
- Bosturangko ra.bana altuna gita aro farm-o man.giparangko altuae palna man.na amna gita, anti sepanggipa ong.na nanga.

NOK RIKANI DESIGN:

1. Name balwa jokrurana man.gipa ong.na nanga.
2. Biapni apala, do.o mangprakna 1 sq ft ong.na nanga (deep litter system) o.
3. Ro.gipa do.nolni bak (lengthwise) saliram- salaram ong.na nanga.

Nok Rikani System: A.pa ra.doe rikgipa (Raised floor system), a.pao bol biginchi ane rikgipa (Deep litter system). Komia dam-o nokko rikna, biaptango man.gipa bosturang jekai wa.a, bol, am.pang etc ko jakkalna man.a.

Manage ka.an: Nangnika gita productionko man.na, management-an broiler jilanio nangchongmotgipa bak ong.a. Management system-o, ka.mao mesokatgipa kamrangan mongsonggipa ong.a.

1) Do.oni jatko baseani- Namgipa atchidaldalgipa do.o bi.sarangko (Day-old-chicks) basena nanga.

2) Do.bisa ra.bana skang tarisona nanggnirang:

- Do.nolo aro bol ginchi angipao sam (sanitiser) satna nanga.
- Jakkalgitcham bol-ginchiko gale, cha.chak ringchakanirangko su.srangna nanga.
- Chi pipeline rangko su.galna nanga.
- Do.nolko, nanggipa bosturangko, fumigate ka.na nanga.

3) ***Brooding:***

- Brooderko do.o ra.bana kanta 24 skang teng.ate donna nanga.
- Brooder ni ding.aniko, skanggipa antio 95° F oni a.bachenge, 5° F antiprakon komiate 70° F ona ding.atna nanga.
- Do.bisa roramaoniko champengna, chick guard ko antisade donna nanga.

4) ***Ventilation:*** Do.nolo namgipa, ka.singipa balwa name balrorona man.na gita, do.nolni kosakgipa pakmani bakko, wire mesh on.na nanga.

5) ***Lighting: Ja.tenganiko, chotchanggijan skanggipa saloni- palani somoionan on.na nanga.***

6) ***Do.o mangprakna biap nanga:*** 0.8 to 1 sq ft.

7) ***Deep Litter Management:***

- Sambajolo man.aniko nigrike, do.nolni a.pao angipa bosturangara bol-biginchi, cha.che den.chemchemgimin megap etc ong.na man.aia.
- Gital litter ko do.bima damberangna aro gital ra.bagipa do.orangna jakkalna nanga.
- Litterni sosie tom.ako champengna gita, do.nolni humidity ko maintain ka.na, litterko cho.biljringna nanga.

POULTRY FEED /DO.ONI CHA.ANI.

Do.oni bitchi chi.an, dal.an (production performance) ara uarangna on.gipa dana/feed-o pangchakani gimin, do.orangna cha.an on.aniera, do.o jilanio, namen mongsonggipa ong.a. Do.orangna cha.an on.anio tik ong.gijaniara, uarangi bitchi chi.an, be.enni jrimani (production performance) kosan affect ka.aigija, do.orangni dingtang dingtang sabisirang-koba (deficiency diseases) ong.ata. Dana/feedo nanga gita nutrients (carbohydrates, protein, fats, minerals & vitamins) ba dongna nanga. Una agreba digestion-ko namdapatna aro do.oko milatna gita feed- additivesko commercial feed-rangode brina.

DANANI ROKOMRANG:

- Pre-starter –sal 0-10
- Starter- sal 11-21.
- Finish- sal 22 oni palaona.

BROILER DO.ORANGNA CHA.ANI ON.ANI:

SL NO	BILSI	DANA-NI ROKOM	SALPRAKO MANGPRAKNA BAIDITA FEED NANGA
01	ANTI 0 - 1	Broiler Pre -starter	15 gms
02	ANTI 1 - 2	Broiler Starter	40 gms
03	ANTI 2 - 3	Do	60 gms
04	ANTI 3 - 4	Do	80 gms
05	ANTI 4 - 5	Broiler finisher	120 gms
06	ANTI 5 - 6	Do	140 gms
07	ANTI 6 - 7	Do	160 gms
08	ANTI 7 - 8	Do	170 gms

Tikka su.anis somoi:

Sl n o	Age	Name of the vaccine	Dose	Route
1	Day old	MAREK VACCINE	0.2 ML	S/C
2	Sal 5-7 TH	LASOTA VACCINE	1 DROP	I/O I/N (micron ba gingting-o)
3	Sal 14 TH	IBD VACCINE	1 DROP	DO
4	Sal 28 TH	LASOTA VACCINE	Dut powder baksa	D/w (chi baksa)

Noko watbrange do.o jilani / Backyard Poultry farming

- Low input do.orangna name simsakgenchim ong.ode, rong 130 - 140 bitchirangko bilsisao man.a. Uarangni bitchi chi.anira do.nok (local do.o) jean rong 70 mang bitchirangko bilsisao chi.achim, uarangna changgni bata. Name manage ka.na man.ode, low -input do.orang anti 22 - 26 rangon bitchi chi.a. Low Input do.orangara Kuroilers, Giriraja, Rainbow Rooster, Local Indigenous Chicken ong.a.
- Low input do.o 130 – 140 bitchirangko bilsiprako chi.a. Do.nok rong 70 do.chirangko bilsisao chi.a.

Do.nol name rikani miksongani / Principles of good housing

- Do.nol, do.orangko balwa ta.rakaoniko naljoke rakkina nanga. (jechipaknin balwa ta.rake bala, uchipak pakmarangko taribo.
- Am.pang chate on.gipa ba galvanized iron-sheets ni nokking-ko name a.palchina apale done ba overhang gnang tariode, do.orangko mikkaoniko naljoke rakkina man.a. Do.orang, sosigipa ja.ako aro mitchigipa, seenggipa a.parangko namnikja.

1. A.mangchi reppigipa a.pao, litter on.e nok rikani.

- Do.orangko bitchi bang.e chi.atna aro name dal.atna gita, uarangna namgipa do.nol jeon cha.chak-ringchakna, bitchi chi.na do.gring, gadoe rona perch aro litter ana, uko nanga. Litter-ara den.chemchemgimin samsi, bol-biginchi, bnekatgimin me.rakku bikoprang, cha.che etc iarangan ong.a..

2. Gan.changni do.nol aro slat angipa a.pa.

- Indakgipa nokkora a.mangchi reppie, litter on.e do.nol rikani pal rikskaa. Ia gan.changni do.nolkora krong dotbri songe, do.nolni a.pako bol ba wa.ani slat ko on.e taria ong.a. (1cm chatgipa wa.ako, 1-2cm a.kol done wa.se wata). Do.nolni kokkimachi do.o napna man.jana gita, kokkimako bera peng.na nanga.

Namgnirangara:

- Do.oko chikgipa chipu, mese ba indakgiparagoniko do.oko nambate naljoke rakkia.
- Do.ki jean bang.a jo.ong aro sabisi -Coccidiosis ni ja.pang onga, uamung do.oni bang.e contact dongja.
- Litter anna nangjani gimin kam bang.breja.
- Rongtalgipa balwa nambate napna man.a.

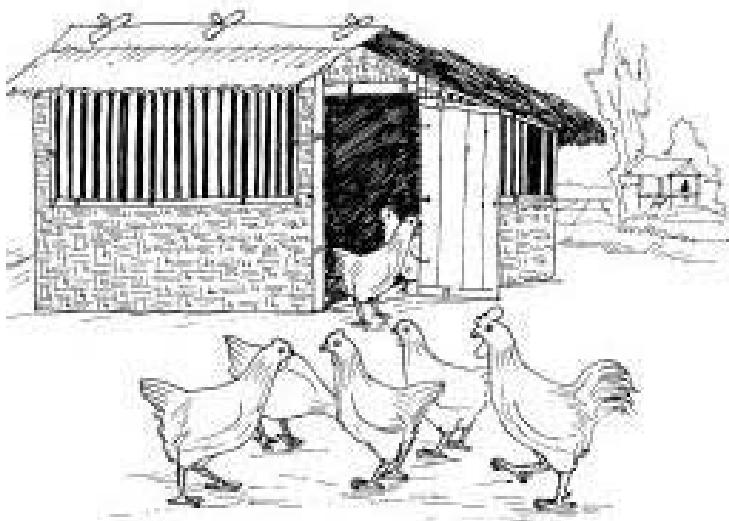


Fig. Songni poultry farm ni do.nol.

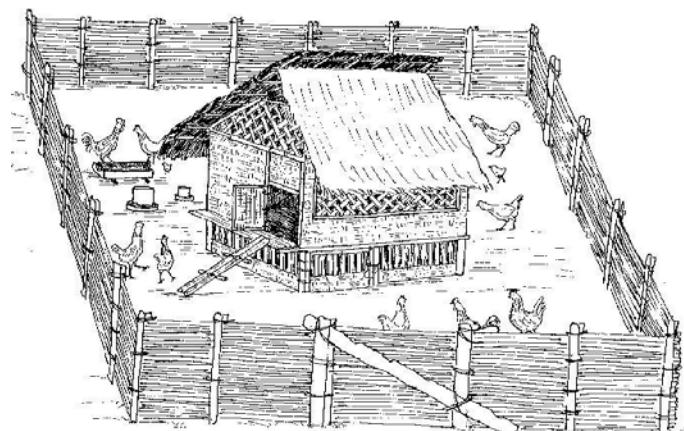


Fig. Bera kagimin walo donchakgipa do.nol.

CHA.CHAK RINGCHAKANIRANG

1. Cha.ani on.chakani/ Feeders :- gari chakka gitchamonikoba, cha.ani on.chakgipa/Feeder-ko tarina man.a. Cha.chakgipao do.o mangsa manggipinoni 6-8 cm chel.grike danako cha.na biap dong ode nama. Dana ga.ake nosto ong.aniko champengna gita, cha.chakgipani riking / lips 2 cm ong.na nanga. Cha.chakgipako do.oni size ni kri rong.te ba bolko on.e ba kadingdee nigrike ka.na nanga.

2. Chi ringchakani/ Drinkers:- Do.orangko nokningoba rakkichina ba a.paloba wate donchina, uarangna ringani chi-ko on.na nangchongmota. Ding.gipa ba ran.gipa somoiode, do.orang gipin somoina bate chi-ko changgni bate ringa. Uni gimin, do.orangni chi ringako nina nanga. Do.orangni ringchakanirango mamung saloba chi gri ong.na nangja. Namgipa ringani chi, do.orangko an.senge rakkia aro do.o bitchi chi.aniko bariata.

3.Bitchi chi.anि bitip/Do.gring:- Do.orang bitchi chi.na a.bachengahaon, uarangna do.gringko tarie on.na nanga. (Ge.1-2 do.gring- mang 5 do.bimana) Do.gringko je bostuonikoba tarina man.a aro uko do.nolni andalgipa bak-o donna nanga jeon do.o-onा sal teng.anि sokja. Do.gringnaba gital gital litter ko on.na nanga aro ukoba rongtale donna nanga. Ding.gipa somoioide, do.gringko balwa nanggipa biapo donna nanga.

4. Litter – Litter-ara sabisi man.aniko komiata: Iara mongsongbate do.bisarangna ong.a jerangan agre sin.ako, balwao chi bang.aniko(humidity) aro balwa ta.rakaniko (air current) chakna man.ja. Litter-ara balwao donggipa chi-ko salopgipa, a.pao angipa bostu ong.a jekai megap, chitchemchemgimin lekka, bol-biginchi, bol ratani bigilrang, cha.che etc. Litter-ara do.o ki.irangni chi-ko aro chi ga.akgipako salopenba ran.e rakkia.

DO.BIMAKO BASEE BITCHI CHI.A KOMIGIPARANGKO PALE GALANI:

- Namgipa do.bimakode, bitchi bang.e chi.anि gimin aro an.tangni do.bisarangna simsakani gimin, on.tisa moilarara dake aro an.chi gri dake niknaba donga.
- Do.o rim.anि hook-ko jakkale do.orangko nina gita rim.na man.a. Hook-chi do.o ja.tengko rim.a.

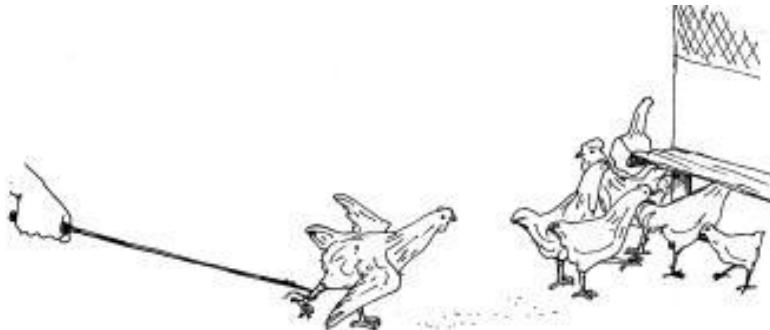


Fig. Culling hook-chi do.o rim.engā.

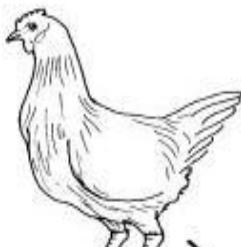
DO.O BAMANI ARO PE.ANI:

1. Nambate do.o pe.aniko manage ka.anि

- Do.o pe.aniko name manage ka.na man.ode, do.oni bamgipa bitchirangoniko, bang.bate bi.sako pe.atna man.gen.
- Do.o badita bitchi chi.a aro badita do.bisa pe.a, ka.mao janapgiminrango pangchaka:
 - Do.ona on.gipa danani nama ba namgijanio aro badita dana on.a.
 - Badita mang do.bimana badita mang do.bipako rakkia. (The cock: hen ratio). Do.chirangko name bi.sa pe.atna man.na gita, mang 10 do.bimana mang 1 bipako rakkina nanga. Do.o jilgipa mandeo do.bima mang10 na batode, bipa mangsako rakkidapna nanga.
 - Bano bitchi chi.a, bama aro pe.a.
 - Do.o bitchi chi.mitingo, bitchirangko maikai rakkia
 - Bi.sa pe.na bamatgipa do.chi badita ruutaha
 - Bitchi bang.e chi.atna, do.ona namgipa cha.aniko on.na nanga.
 - Bitchi name chi.na man.na gita, do.ona gring-ko name tarie on.na nanga.

- **Bisa pe.atna bitchi baseani/ Egg Selection:-**

- Do.ki nangstipe mitchigipa do.chi aro a.palo ba a.pao chi.gipa do.chirangko bamna basena nangja. Agre gitcham do.chikoba (sal-10 batahaode).
- Apsan do.chi aro rongtalgipa bitchirangkosa bamna basena nanga. Do.chiko dokpeon, namgipa do.chini rimitgipa bak(yolk) boroma indiba namgijagipa do.chini rimitgipa bak pelgapa ong.a.
- Do.bima bitchi chi.na a.bachengahaon, salantian apsan ong.e, bitchirangko kolamna nanga (mongsongbate pringo jensalo uarang bitchi bang.e chi.a). Do.oni do.gringo bitchi chi.aniko ranta ka.a gita, do.gringo rongprak bitchiko donna nanga. Apsan do.chiko gringo donna uina man.na gita, bitchiko pencilchi chin dakna nanga. (pencilchi chin dakora do.chi nosto ong.ja).



DO.CHINI SIZE;



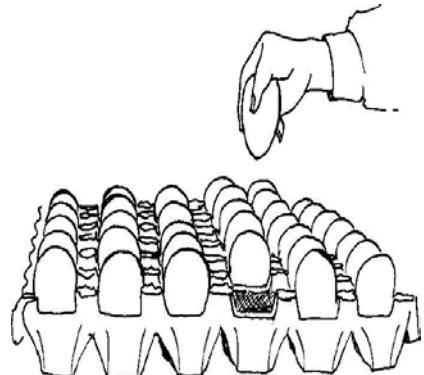
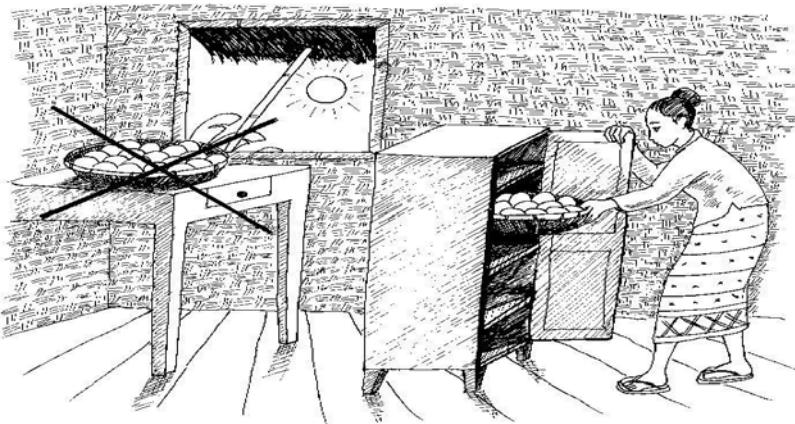
AGRE CHONDUGAA; 45 grams na bate komia (ia do.chira do.rimit gri ong.naba donga)

NORMAL; 45 - 70 grams

AGRE DAL.DUGAA; 70 grams na bata (ia do.chide do.rimit ge.gni dongnaba donga).

- **Do.chiko donani /Egg Storage**

- Do.chiko name dongna nanga. Do.chiko ka.singipa aro andalgipa biapo donbo. Jegita dongipa biap ka.sina, inditan do.chi ru.utaona name donga.
- Name bi.sa pe.ani chu.sokna amna gita, salni teng.ani tongtong do.chio ga.akna nangja.
- A.pao ba flooro mamung salona do.chiko dona.nabe. Do.chi dongipa biapo agre balwa nangna on.nabe.
- Do.chini ku.chokgipa bakko ka.machi donrongna nanga.
- Antisana bate do.chiko rakkie donahaode, salantian ka.ma kosak dake, donako dingtangatna nanga.
- Do.chiko su.srangnabe. Do.chiko su.srangahaode, ua bi.sa pe.jaha. Agre mitchigipa aro a.pa-o chi.gipa do.chirangko bamna gita ra.rongja. Do.bima dingtang dingtangni bitchirangko pencilrangchi chin dake uina gita man.a.
- Do.chirangko ruute rakkina man.aniara, do.chirangko maikai dona, uno pangchaka. Aro ka.singipa biaprangode, do.chiko ruute dona man.a.
- Do.chiko sal 7-10 nade name rakkie donna man.a indiba uni ja.mande do.chini bi.sa pe.ani komiaiaha.



NOKSAMO WATE JILGIPA DO.ORANGNA TIKKA SU.ANI:

Sl no	Bilsi	Tikkani bimung	Dose	Route
1	Pe.daldal	MAREK VACCINE	0.2 ML	Bigilo (S/C)
2	Sal 5-7 TH	LASOTA VACCINE	1 DROP	Gingtingo ba mikrono (I/O I/N)
3	Sal 14 TH	IBD VACCINE	1 DROP	Ringani chio (DO)
4	Sal 28 TH	LASOTA VACCINE	Dut powder	Ringani chio (D/w)
5	Sal 35 th	Fowl pox	0.2 ml	Muscle-o (i/m)
6	Anti 7 TH	R2B VACCINE	0.5 ml	Muscle-o (i/m)

- *Ok-ni jo.ongni sam ko ja 3 prako ja 1-2 oni a.bachengen on.na nanga.*

SABISIRANGKO CHAMPENGANI ARO CONTROL KA.ANI:

Do.o jilanio, do.oni sabisirangko control ka.anian aro champenganian, sana-bananiko dakanina bate nambata.

Do.oni mitam sabisirangara:

- **Viruschi ong.atgipa sabisirang / Viral Diseases -**

○ **Ranikhet** / New Castle Disease

○ Chinrang :

- Farm-o jilgipa gimik do.okon saatna man.a.
- Rang.sitna neng.nikaniko man.a.
- Ging jo.ola.
- Cha.ja ringja.
- Ki.i tangseke ok re.a.
- 90-100% do.o sia.



- Champengani : senggnang F1tikkako su.anj ja.man R2B tikkako on.na nanga.
- **Marek's Disease**
- Chinrang :
 - i. Gimik do.okon saatna man.a.
 - ii. Grangrang gongdopa, ja.kora ong.a ba an.magoka ong.a.
 - iii. 60- 70% do.orang sia.
- Champengani : tikka su.anichisan.



- **Infectious Bursal Disease**
- Chinrang :
 - i. Sko choknoka/ drooping head (asol chin)
 - ii. Mikron mikchipa.
 - iii. Depression ong.a aro ki.sang moila ong.a
 - iv. Ki.i gipoke ok re.a.
- Champengani : seng.gnang tikka on.ani aro sabisi champengna raken niamko tarianichi (strict biosecurity measures).
- **Avian Influenza**
- Chinrang :
 - i. Gingmat aro wattle gisima aro an.chi kama.
 - ii. Ja.a boa.
 - iii. Ku.sikchi rang.sita.
- Champengani : Saa man.gipa do.orangko dingtang donbo ba cull ka.bo. Gimik do.nolkon sam on.e rongtalatna nanga aro namgipa sabisi champengna niamko tarianichi (good biosecurity measures).
- **Bacteriachi ong.atgipa sabisirang / Bacterial Diseases-**
 - **Salmonellosis**
 - Chinrang:
 - i. Chalk gita gipoke ki.a, ok re.a.
 - ii. Rang.san sia .
 - iii. Ki.sango ki.i nangstapa.
 - iv. Gimik bilsini do.okon saatna man.a.
 - v. Depression ong.a aro be.en ram.a.
 - Sana-banani:
 - a. Namgipa antibiotic sam-ko jakkalbo (sepangbatgipa veterinary centre-on a re.angbo).
 - b. Saa nampilgipa do.orang, saatgipa jo.ongko ra.bite donga. Uni gimin saa nampilgipa do.orangko cull ka.bo ba so.ote galaibo.



- **Colibacillosis**
- Chinrang:
 - i. Gimik bilsini do.orangkon saata.
 - ii. Ok re.ata.
 - iii. Sko miksulata.
 - iv. Greng biritchurangko ripomata.
 - v. Gingmat aro wattle boa.
 - vi. Do.oni siani - 90%.
- Sana-banani : Antimicrobial samrangko on.na nanga (sepangbatgipa veterinary centre-on-a re.angbo).



- **Fungus-chi ong.atgipa sabisirang/ Fungal Diseases-**

- **Brooder pneumonia / aspergillosis**
- Chinrang :



- i. Do.bisarangko saata.
- ii. Do.bisarang bang.en sia.
- iii. Rang.sitna neng,nika.
- iv. Mikron aro sko ripoma.

- Sana-banani : Antifungal sam-ko on.bo.(sepangbatgipa veterinary centre-on-a re.angbo).

- **Ok-o donggipa jo.ongchi saatgipa sabisirang / Helminthic Diseases-**

- Chinrang :
 - Do.bima bitchi chi.giparangko saatbata.
 - Cha.a ringa komia .
 - Dal.ningja.
 - Kimilrang sera bera daka.
 - Ok re.a
- Sana-banani: Anthelmintic sam ba ok-ni jo.ongni sam-ko ja3 prako on.na nanga. (veterinary centre-on-a re.angbo).

- **Protozoan Diseases-**

- **Coccidiosis**
- Chinrang :
 - i. Ki.i an.chirara dake ok re.a.
 - ii. Grangrang gongdopa /Droopy Feathers
 - iii. Do.o bang.en sia.



- Sana-banani:

- i. Name farm-ko manage ka.na nanga.
- ii. Anticoccidiosis sam-ko on.na nanga (sepangbatgipa veterinary centre-on-a re.angbo).

Sabisiko champengani aro control ka.ani cholrangko ka.mao mesokatenga:

- Sabisi grisipa do.oni stockko ra.baesa farm-ko a.bachengbo.
- Do.bisarangko pe.chakram biap/hatchery on Ranikhet & Marek's sabisi ni tikkako su.bo.
- Coccidiostal sam-ko coccidiosis sabisiko champengsona on.bo.
- Danako dadimit chana on.nabe.
- Rongtalgipa chola ba.ra aro sam-chi su.galgimin jutarangko ganjaode, kam ka.giparangko aro gipin manderangkoba do.nolo napna on.na nangja. .
- Do.nolni a.pao 3 inches chate rongtalgipa litter-ko anna nanga.
- Sabisi man.aniko komiatna gita, do.o jilengon ge.sa batch ko apsan done, apsan palna nanga. (All-in- all-out system)
- Sam gnanggipa chi-ko do.nolni cholgugao donchongmotna nanga.
Gital gital rongtalgipa chi pangnan ringchakanio dongna nanga.

SEE JOTE RAKKIANI/ RECORDS KEEPING

See jote rakkianiara do.o flock ni performanceko aro koros ong.aniko nina dakchaka aro flock ni silroroaniko nirokna dakchaka. See rakkianiara, bading chewalna, tangka paisana aro be.en namgni ko rakkianiana mongsonggipa ong.a. Namgipa aro lap ong.gipa do.o jilani chu.sokaniko, namgipa see rakkiani guarantee ka.jagenchimoba, ua gri chu.soknaba man.taija. See jote rakkianiara chu.sokgipa flock ko nirokani mingsa jakalgipa ong.a. See jote rakkianio, tangka paisa (financial), do.oni bitchi chi.ani ba badita jrimani (production), an.sengbaljokani (health status), pilakkon maintain ka.na aro rakkina nanga. Iako jakchiba ba computer ko jakkaleba see rakkina man.a. See rakkianiara mongsonggipa ong.a. See rakkianiara bading chewalo bano aro bachipak re.angenga (lap ma noksan), uko farm-ko dakgipa mandena mesoka. See rakkigipaan, do.o jilani tangka paisani gita ba farm-ni bilakaniko ba bilgrianiko mesoka.

1. Breeding Farm-o rakkigipa registrang:

1.1. Basic Registers

1.1.1. Attendance and Daily wages register:- Ia register-on kam ka.giparangni chugimik (bimung, me.a ma me.chik, banoni etc) ko, uamangni salantio kam ka.na re.baaniko aro uamangna hajira on.a gimikkon see rakkia.

1.1.2. Building Register:- Farm-o badita ge nokrang donga aro uarangko niroke badita korosko nanga, bilsigimikni depreciation etc , pilakkon ia register-o see rakkia.

1.1.3. Equipment Register:- Farm-o badita ge, mai mai dakgipa bosturang ba machinerang jekai dana bringipa/bnekatgipa mill (feed mill), garirang (vehicles), katcharang (cages), do.o bi.sa pe.atgipa machine (incubators), cha.chakanirang (feeders) ringchakanirang (waterers) etc.donga, iarangko ia register see rakkia.

1.1.4. Feed and feed ingredient register:- Dana tarigipa bosturangni (feed ingredients) chugimik jekai badita dana dongachim (opening balance), man.soani (receipts), badita onata (issues), donmitingo gimaani (storage loss) aro badita dongrikkuenga (closing balance) iarangko ia register see rakkia.

1.1.5 Feed additives and medicines register:- Dana/feed o bringipa sam (feed additives) , samrang (medicines), tikkarang (vaccines), rongtalatmitingo on.chapgipa sam (disinfectants, chemical) etc ko breaniko aro jakkalaniko ia register see rakkia.

1.1.6 Petty items or miscellaneous purchase / expenditure register:- chona rema bosturang jekai jakalgipa, stationery, bulbrangko breaniko aro salantini chonchongipa korosrangko ia registero gate dona.

1.2 Technical Registers: do.oni jat aro maidakgipa do.o aro uarangni bitchi man.ani ba do.oni jrimani ba uarangoniko man.ani ba koros ong.ani ko ia register-o segate dona.

1.2.1. Breeding Farm Register :- Ge.prak batch-ni bitchi man.ani ko jilchengaoni-palaona- somai gimikniko iano gate dona. Do.oni jat-ni kri see rakkina man.ode, uarangna koros ong.aniko hisape rakkina nambate man.a.

1.2.2 Egg turn out register:- Batch-prakniko do.chi badita man.a, uarangko iano see rakkia. Do.o sarongni bitchi, be.gimin do.chirang aro do.chirang jerangkon pe.atna namja, iarangni chugimik-ko ia register-o see rakkia. Salantio do.chi palanikoba iano see rakkina man.a.

1.2.3. Do.bisa pe.ataniko see rakkiani / Hatchery records

1.2.3.1 Stock register:- Ia register-o tarik, dongsogipa, man.soani, pe.na donatgipa, galgipa aro palgipa , do.bisa pe.gipa , do.bisa palgipa, do.bisa culled ka.gipa/ nom.gipa , bipa bi.sarang jekon indin on.a aro remarks, ia changchang dake tarina nanga.

1.2.3.2. Batch-prakni do.bisa pe.aní sheet:- badita rong bitchiko pe.na dona, do.chini rokom, strain, do.chi pe.atna banoniko ra.baa, mombatio nie test ka.o, bo.olgipa do.chirang , badita mang name bi.sa pe.a, badita mang nom.e bi.sa pe.a, badita mang bi.sa bipa pe.a aro maidake palata, bi.sa pe.aní percentage.

1.2.3.3. Do.bisa pe.aní aro palani register:- Ia register-o do.o jat prakni do.bisa pe.aniko aro palaniko see rakkia. Ia registerko changchang dake tarion. Tarik, badita do.bisa dongsoa do.bisa pe.a , do.bisa palani , an.tangtangna rakkirikgipa do.bisa, do.bisa galgipa, bi.sa bipa jekon indin on.a, dongrikgipa do.bisbarang , do.o mangprakni dam aro remarks, iarangko tarina nanga. Remarks ine chang dake don.gipa-o do.bisbarangko Marek's sabisini tikkako su.ama su.kuja ba gipinrangko segate donna man.a.

2. Do.oni Performance Tests-ko see rakkigipa register:

2.1 Bitchina jilgipa do.o farm-ni / Layer farm: Batch-prako, nol ge.prako, jilenggipa do.orangna badita koros ong.a, baditako man.pila, uarangni bitchi chi.ani badita ong.a, iarang pilakkon, jilenggipa somoi gimik nikko ia register o segate donna nanga.

2.2 Be.en cha.na jilgipa do.oni farm-ni /Broiler farm: Batch-prako, nol ge.prako, jilenggipa do.orangna badita koros ong.a, uarang badita sal-o badita kg ong.a, iarang pilakkon, jilenggipa somoi gimik nikko ia register o segate donna nanga.

DO.BISA PE.ATGIPANI DESIGN /HATCHERY DESIGN

• Biap

- Ia nokko gipin do.nolrangoni, man.a dipetde chel.kala biapo rikna nanga aro jechipak balwa bala, balwani ramako nigrike rikna man.ode nama.
- Agre chugipa biaprango chong.motan, chi-ni level (sea level)ni 2500ft (760m) na bate chubatao, ia nokko rikna nangja, ong.jaode oxygen man.ani komigen.
- Gipin do.nolrangoni 500 ft chel.ao ongna nanga.
- Chu.onga gitu chi man.gipa biapo ia nokko rikna nanga.

- **Lay-out**

- Do.bisa pe.atgipa noko, ge.sa napani aro ge.sa ong.katani cholgugako on.aiode nambata.
- Do.bisa pe.atgipako tarie kam ka.an i aro balwa balani ko nigrike rikna nanga. Rikengon indake rikna nanga je, jegitan do.chi aro do.bisarangko ra.napa, ua apsan ramagitan balwani balaniba ong.na nanga.
- Do.bisa pe.na don.gipa do.chirangko, napchenggipa do.ga o ra.rike, pe.gimin do.bisarangko, ong.katgipa gita ra.ongkatna man.na gita nigrike nokko rikna nanga. i.e, do.bisa pe.atanio do.chi aro do.bisa ge.sa ge.gipinko, kuturi ge.saoni ge.gipinona ja.rikna nanga
- Jeko ge.eta uko dakna nanga, nipiltaiani dongna nangja.
- Mikkangchi dal.dapatna nanga gita chuonge biap ko donna nanga.

- **Nok rikani**

- Do.bisa pe.atramo, dingtang dingtang kamko ka.na, dim.penganirang dongna nanga.
- Name tarigimin nok ong.na nanga aro kam ka.gipa area-na dingtang balwa jokna don.na nanga.
- Ceyling ni chua 10 ft mang ong.na nanga.
- Pakmarang, a.parang aro ceylingrangba so.omgipa bosturangchi tarigimin, rakgipa, ching.gipa aro chi salopgijagipa ong.na nanga.
- Pakmarango agre bang.dugae ritchudapanirang aro tapdaparang dongjaode nama jedakode name rongtalatna man.gen.
- Wa.al kamna altugijagipa bosturangchi, do.bisa pe.chakatram nokko tariode nambata.
- Do.garangni ka.mao bol (threshold)-ko on.jaode nama jedakode cart-rang aro rackrangko altue jitrunana man.gen. Do.gani chuani 8ft aro apalani 4ft ong.na nanga aro do.ga pala-gni ong.na nanga.
- Bretjana gita, a.pako sil on.e cementchi tarina man.ode nama.
- Do.bisa pe.atram nokni a.pa, kuturiprakni nalaona on.tisa onate tarina nanga indiba onani-ara 10 feet kuturi-o 0.5 inch na batna nangja.
- Do.chi biklaprang aro moilarang dapengjana gita, pe.atchakram nokni nalao net-rangko on.e donchange tarina nanga.
- Chi bang.ako aro rakgipa moila ko ruprake galatna man.na gita, nalako dal.kale tarina nanga.
- Ventilation ko rongtalgipa biaponi, mitchigipa biapona, balwa jokangna man.na gitasa nigrike tarina nanga; mitchigipa biaponi rongtalgipa biapona ong.ja i.e do.chi dongipa (egg setters)-oni do.chi pe.gipa (hatchers)-ona re.a gita.

- **Nokni bimang/ Structures**

- Bi.sa pe.atram nok kraa gita apalna nanga aro uni apalaniara bi.sa pe.atgipa machine (incubator) ni dal.an, aro badita rong bitchi-ko changsano donna man.a aro badita mang do.bisarangko antisao pe.atna man.a, uno pangchakna nanga.
Bi.sa pe.atchakram noko, ka.mao janapgiminrangna kuturi ge.prak dongna nanga.
- Do.chi ra.sochakram aro chimongchakram kuturi ; ge.sa direction-o.
- Do.chi-ko trayo donchakram,
- Do.chi-ko rongtalatram (Fumigation);
- Do.chi-ko set ka.ram (Setting) ;
- Do.bisa pe.chakram (Hatching);
- Do.bisarangko ra.ongkate, bima bipako dingtangate donram, raruragipa box-o packing ka.ram;

- Bosturang (do.chi, do.o chipgipa boxrang, do.chi pelgapgipa, box-o angipa pad-rang, Chemicals etc)-ko chimonge donram kuturi.
- Bosturangko su.galchakram aro jabol galram.
- **Kuturio napna skang ba.ra gansreram / Change over room**
 - Hatchery ona napna skang ba.ra gansrena man.na gita, napramo ge.sa chongipa kuturi dongna nanga.
 - Jaksuna gita, kuturio jaksuchakram biap dongna nanga.
 - Napchakramo ja.suna gita, sam bringimin chi-ko rama reramo donna nanga.
- **Do.chi ra.chaksoram ba tariram kuturi / Egg-Receiving / handling room**
 - Dingtangmancha tarigimin do.ga gitasa, do.chiko, pe.chakram kuturi ona on.atna nanga aro farm-o kam ka.giparang ia do.ga gitasa do.chirangko on.atna nanga.
 - Do.chirangko nama namjako baseani aro tray-o donataniko ia kuturion dakgen. Ia kuturi-ara basenasienggipa aro tray-o donatnasienggipa do.chini bang.aniosan pangchakaija, uno jakkalnasienggipa bosturang jekai do.chi box-rang, setting carts aro prading machine-oba pangchaka.
 - Ia kuturini ding.aniara 18-20°C and chijimaniara ra 70-80% ong.na nanga.
- **Do.chi chimongchakram kuturi / Egg storage room**
 - Ia kuturira name tarigimin ong.na nanga aro ia kuturio kelki dongna nangja. Iano doktani gachakramrangko anna nanga.
 - Kulturini chuani 8 ft ong.na nanga, aro name balwa jokrurana man.gipa ong.na nanga.
 - Ia kuturio apsan sin.a-ding.aniko man.na gita, kuturi ka.sinatgipa machine dongna nanga.
 - Kulturiko ka.sinatani dongjaode, walo ka.singipa balwa balani somoio, kuturiko opangpange donenba, salo dingani somoio, kuturiko chipe donna nanga.
 - Kulturini chijimaniko rakkina gita, chijimate dongipa bostu ko jakkalna man.a.

*Fig. Do.chi chimongram
kuturi*



- **Do.chi rongtalatram kuturi / Fumigation room**

- Ia kuturi ara do.chi tarichakram aro donram ni gisepo ong.na nanga aro ian sluice gate gita kam ka.a.
- Bang.gija fumigant sam-ko jakkalna nangna gita, Kuturi man.a dipetde chongipa aro balwa napgijagipa ong.na nanga.
- Rongtalatram kuturi ba fumigation room-o iarang dongna nanga:
 - Formaldehyde gas-ko do.chi dongipa rack-rangni gisepo name gipatna man.na gita, ka.sine wilwilgipa ventilator ko kuturio donna nanga.
 - Rongtalatmitingo ba fumigate ka.mitingo chipna aro matchotjoko gas-ko wate galna man.na gita, ceyling-o exhausting ventilator-ko tekna nanga.
 - Aro Air-inlets ko ka.mao tekna nanga jekon fumigate ka.ani somoio chipenba. matchotjoko, exhaust ventilatorko chalaimitingo kulina man.gen.

- **Do.chi set ka.ram kuturi / Setting room**

- Setters-ko ia kuturio dona. Setting kuturini apalaniara jakkalenggipa bostu-o pangchaka.
- Komibeoba 3 feet space-ko, setter-ni sambeng ge.saoni ge.gipinona aro pakmaoni setter-ni sambeng ba ki.sangni bak ona donna nanga. Apsan dake, komibeoba 10 ft space ko setter ge.gnini mikkango donna nanga (mikkangchakgrike donode)
- Ventilation capacity ara maidakgipa machine-ko jakkalenga aro kuturini dal.ani, uno pangchaka. On.tisa overpressure ventilation system ko on.na man.ode nama.



*Incubator ba bi.sa pe.atgipa machine-ni balwa joke katgipa, incubatorni ong.katgipa balwa ding.gipako wate galna man.na gita, plastic tube ko tekna nanga.

Fig. Setter in a Setting Room

- **Mombati-o test ka.e, bi.sa pe.na watatgipa kuturi / Candling and transfer room**

- Do.chi namama namja, mombati-o test ka.e, do.chiko bi.sa pe.na ia kuturion donata. **Ia** kuturiara setting aro hatching room-ni gisepo ong.na nanga.
- Mande kam ka.na, do.chiko cart-o salrurana aro machine donchakna chu.onga gita ia kuturi apalna nanga.

Mombatiko so.e. do.chi nama namjako nina altuna gita, ia kuturiko andalatna man.e tarina nanga.



Fig. Candling room

Pe.atchakram kuturi / Hatching room

- Bi.sa pe.atnakgipa bitchirangko ia kuturio rakkia.
- Setter room gita, ia kuturikoba apsan apalen tarina nanga.
- Ia kuturi-ko setting ka.gipa kuturioni sluice ba gate dakgipachi namemanchan dingtangatna nanga aro rakgipa kuturini do.gako, do.chi raruraani somoina agre, name teke donna nanga.
- Incubator ba do.bisa pe.atgipa machineni balwa joke katgipa biapo, air exhaust ventilation system ko tekna nanga.

Do.bisako tarichakram kuturi / Chick handling room.

- Ia kuturi-ni dal.aniara, badita mang do.bisarangko pe.ata aro uarangko salruragipa cart-ni dal.anio pangchaka. Ianon do.bisarangko bima ma bipa basea, nama namjakoba ianon nia, tikkakoba ianon su.a aro uni ja.mano bi.sarangko box-o chipa.



Fig. Hatcher in Hatching Room

- **Rongtalatchakram / Wash Room**
 - Ia kuturion gimik bosturangko jekai hatching carts, chick boxes and gipin bosturangko rongtalata, su.gala aro samrangchi sugala ka.a.
 - Chi tarakgipa bang.e jokgipa pipeko ia kuturio tekna nanga.
 - Tray aro do.bisa donchakgipa box-rangko dim.e donna man.na gita, iano sorea gita dakgipa ba water tub-ko tekna nanga.
- **Chimonge donram kuturi / Storage room**
 - Samrang on.e rongtalatgimin do.bisa dongipa box-rangko aro gipin bosturangko ia kuturion donchaka.
- **Jabol galram/Waste room**
 - Sigimin do.bisarangko aro do.chi biklaprangko galgipa jabolrangko ia kuturion dikdiksana donchenga.
- **Gipin kuturirang / Other rooms**
 - Kam ka.giparangna auchakani aro toilet-rang.
 - Dal.dalgipa bosturang jekai generator, water cooler and water purifying systems aro Alarm systems iarangko donchakna kuturi.
 - Gimik hatchery-on, current sioba chu.onga gita currentko bi.sa pe.atgipa machine-na on.na man.na gita automatic generator dongna nanga.
 - Alarm systems-ara current sijoko ba machine maiba ong.joko gam.a aro indake uno kam ka.gipa manderangko maiba nosto ong.a ine mikrakata.
 - Incubator machine nosto ong.ako ba current siako uiatna, gam.gipa alarm system-na agreba, ua machine-o temperature bang.engama ma komiengama uko uiatgipa secondary alarm system incubator gimikon dongna nanga.

TURKEY JILANI

- Do.o jilani ja.mande, Turkey jilanian mongsonggipa ong.a.
- Turkey be.enan, do.o jat gimikonide be.enrara dakbatgipa ong.a.
- Indigenous and non-descript turkey-rangko Kerala, Tamil Nadu and Uttar Pradesh o nikna man.a.
- Turkey jilaniakora, western a.songrangode namen mingsinga.
- Bang.bate turkey be.enko ong.katatgiparangara United States, Canada, Germany, France, Italy, Netherlands aro United Kingdom ong.a.
- Turkey-ara dal.gipa gallinaceous do.o Meleagridae jatni ong.a aro iara North and Central America o donga indiba Europe-oba iako jila.
- Turkey jilaniko namdapatna ine CPDO Hessarghatta, Kerala and Tamil Nadu staterango rake kam-ko ka.engaa.

TURKEY-O MAIKO MAI MINGA / TURKEY TERMINOLOGIES

- Tom: Turkey bipa dal.ako
- Hem: Turkey bima dal.ako
- Poult: Turkey bi.sako
- Snood or Dew Bill: ku.sik (beak)-o be.en dake nadogipa
- Caruncles:- Sko-o aro gitoko be.en dake nakatgipa.
- Dew lap : Ku.dipe ka.mao bigil dal.gipa.
- Beard :- Ka.bako kni-dake chate chagipa
- Strut : Bipani bima am.miting somoi

TURKEY-NI ROKOMRANG

- Broad breasted bronze
- Broad breasted white
- Beltsville small white
- White turkey jean Indian biaprango jilna nama.
- Broad breasted bronze
 - Kimil ni rong-ara gisimsa ong.a, pitolni rong ong.ja.
 - Bimani ka.bakni kimil gisime, kimil ku.chot gipoka.
 - Uan anti 6 ni gisepon turkey bima-ma bipa uko uina dakchaka .
- Broad breasted white: -Iara broad breasted bronze aro white Holland with white feathers-ko cross ka.gimin ong.a.

BITCHI CHI.ANI / EGG PRODUCTION

- Turkey anti 30th onin bitchi chi.na abachenga. .
- Bitchi chi.na a.bachengaoni anti 24 ona kingking uarang bitchi chi.a.
- Bima bilsio rong 80-100 bitchirangko chi.a.
- 70 % bitchirangko uarang saljatchio chi.a.
- Turkey bitchirangara su.totota git aro 65-80 gm mang jrima.
- Turkey bitchio iarang donga:
 - Protein—13.1%
 - Lipid ---11.8%
 - Carbohydrate—1.7%
 - Mineral content-0.8%
 - Cholesterol –15.67-23.97 mg/gm of yolk

TURKEY BE.EN

- Turkey be.eno donggipa nutritional properties.
 - Be.enrara (lean) daka.
 - Protein—24%
 - Fat ---6.6%
 - Energy value—162 calorie /100 gm be.eno .
 - Mineral - potassium ,calcium ,magnesium, iron ,selenium, zinc and sodiumturkey be.eno donga.
 - Essential amino acid, niacin, vitamin B6 and B12 turkey be.eno bang.en donga. Unsaturated fatty acid ,essential fatty acid ba bang.a aro cholesterolde komia.

TURKEY-KO JILANIO DAKNA NANGGNI KAMRANG /MANAGEMENT PRACTICES FOR TURKEY

- Skanggipa sal 1-15 na agre, jilanio dakna nanggni kamrangde do.o jilanimung apsanaia.
- Bamani somoi /Incubation period -28 days

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

BROODER-O DONANI / BROODING

- Ding.kari – 0-4 anti.
- Sin.kari - 0-6 anti.
- Turkey na jakkalgipa brooder-rangara hover brooder, electrical brooder infra-red bulbs, gas brooder ba bamatronga gita bamatani (traditional brooding system).
- Brooder-ni ding.anide 32° C oni a.bachenge, antio 5° C dake komirikrikatna nanga.

BROODINGNI SOMOIO GISIK RA.NA NANGGNIRANG:

- Anti 0-4 ong.gipa turkeyna biap nanga, mangprakna 1.5sq.ft ong.a.
- Brooder nokko turkey bi.sarangko ra.bana sal 2 skangan tarisona nanga.
- Bi.sa roramjana kapengani ba Poult guard ko 1 ft chue tarina nanga.
- Bi.sa donram nok-ko 95 degree Fahrenheit oni ding.atna a.bachenge, antiprako 5 degree Fahrenheit komirikrikatna nanga (anti 4 ona).
- Ongipa chi ringchakaniko donna nanga.

DRAE CHA.ANI ON.ANI / FORCE FEEDING:-

- Drae cha.ani on.anio, dut-ko, litre-prak chio 100 ml dut-ko brine on.na nanga aro protein aro bilakaniko man.na gita, mang 10 turkey bi.sarangna, ritgimin do.chi rongsako sal 15 na kingking on.na nanga.

- Cha.chakaniko jaksichi doktake, turkey bi.sarangko cha.anि on.gipaona rimbana man.a. Rong gnanggipa marblerangko ba rong.srekrangko cha.chakanirango aro ringchakanirango doneba, bi.sarangko cha.anি on.chakramona salbana man.a. Den.chemchemgimin tangsekkipa bijakrangko doneba, uarangni cha.anি cha.aniko bariatna man.a.

JILANI BEWAL

a. Wate jilani

Namgnirang :-

- Cha.anina bon.gipa korosko 50% ni gita komiata.
- A.bachengna koros bang,e nangja.
- Koros ong.aniko chane, man.dapani bata.

Saa ding.anি: - turkeys rangko wate jilode, uarangara ok-ningo aro be.en kosako donggipa jo.ong chi ong.atgipa sabisirangko man.na altubata. Uni gimin wate jilode, jao changsa dake sam gnang chi-o uarangko dip ka.na nanga aro ok-ningo donggipa jo.ongni sam-rangko on.na nanga.

b. Nolo chipe jilani

Nol rikani:-

- Nol ge.saoni ge.gipinona 20 meter mang chel.grikna nanga.
- Turkey bi.sarangni nol aro dal.giparangni nol, komibeoba 50 to 100 meters chel.grikao ong.na nanga.
- Nolko bangbang dake rikode, nol-ni apala 9 meters na batna nangja.
- Nol-ni chua, a.paoni nokkingona, 2.6 oni 3.3 metersong.na man.a.
- Nokkingni chua metersa mang ong.na nanga.
- Nol baigipa aro chijimgijagipa ong.na nanga.
- Bang.a turkeyrangko nolo donode, chu.onga gitा nol apalna nanga aro cha.chakaniko donnaba chu.onga gitা biap dongna nanga.



Turkey-rangko rim.anি

- Go.olko jakkalbo.
- Nol andalode, turkeyko rim.na altubata.
- Ja.a ge.gnikon saknaatgija rim.na nanga.
- Turkey dal.ako mins 3-4 na bate dingdee donna nangja.



TURKEY JILNA NOLNI APALNA NANGANI

Bilsi	Nolni apala (sq Ft)	Cha.chakaniko donna biap nanga (cms)	Ringchakaniko donna biap nanga (cms)
0-4 anti	1.25	2.5	1.5
5-16 anti	2.5	5.0	2.5
16-29 anti	4.0	6.5	2.5
Turkey breeder	5.0	7.5	2.5

TURKEYNA CHA.ANI ON.ANI

- Turkey na cha.anon.ani bewal Regional Poultry Breeding Farm, Kyrdemkulai-o dake /on.e nigimin onga.
- Turkey feed ba dana turkey starter feed aro turkey finisher ong.a.
- Do.ona bate bang.bata Energy, protein, vitamins and minerals-ko turkey-na on.na nanga.
- Turkey-na cha.aniko on.on ka.singipa somoio on.ode nama.
- Ja.ani bilgrianiko champengna, shell grit-ko salo 30-40 gms dake turkey-na on.na nanga.

FEEDING SCHEDULE OF TURKEY

FEEDING OF POULTS	TYPE OF FEED
-------------------	--------------

<input type="checkbox"/> 0-1 anti ---16 gm/bird /day	Turkey Starter
<input type="checkbox"/> 1-2 anti ---30 "	"
<input type="checkbox"/> 2-3 anti ---36 "	"
<input type="checkbox"/> 3-4 anti ---60 "	"
<input type="checkbox"/> 4-5 anti---72 "	"
<input type="checkbox"/> 5-6 anti--- 90 "	"
<input type="checkbox"/> 6-7 anti---96 "	"
<input type="checkbox"/> 7-8 anti---100 "	"
<input type="checkbox"/> 8-9 anti ---112 "	"

FEEDING OF GROWERS/FINISHERS	TYPE OF FEED
------------------------------	--------------

<input type="checkbox"/> 9-10 anti-- 128 gm/bird/day	Turkey Finisher
<input type="checkbox"/> 10-11 anti-- 134 "	"
<input type="checkbox"/> 11-12 anti-- 140 "	"
<input type="checkbox"/> 12-14 anti-- 150 "	"
<input type="checkbox"/> 14-15 anti-- 154 "	"
<input type="checkbox"/> 15-18 anti-- 160 "	"
<input type="checkbox"/> 18-20 anti-- 170 "	"
<input type="checkbox"/> 20 anti & Batgipa 220 "	"

BREEDING PRACTICES:

TURKEY NI BIMANG / PHYSICAL APPEARANCE OF FORM

- Biparang jrimbata aro kosakgipa ka.bakni bako gisim bread donga.
- Dew bill/ ku.sik ka.mao nakatgipa be.en dal.bata, plum aro elastic ong.a.
- Sko aro gitoko be.en dakgipa- Caruncles anti 5th ong.on gitchak gitchak dake nadoa.
- Atchidaldalon, turkey bipa bi.sade re.na man.a.

- **Natural mating**:- bipa : bima ratio de 1:5 ong.a (dal.kalgipa turkey-na) aro 1:3 dal.gipa turkey na. Mangsa turkey bima, 40-50 turkey bi.sarangko pe.na man.a. Biparangni bi.sa man.atna man.an.i komiani gimin, uarangko bilsio changsa jakkalani ja.mande jakkaltaija. Biparangko sal 15 prakon change ka.a.

Economic Parameters in Turkey Farming

Bipa – bima ratio	1:5
Bitchini jrimani	65 gms
Atchidaldal bi.sani jrimani	50 gms
Bima ba bipa am.an.i bils	30 wks
Bitchi badita chi.a	80 – 100
Bamani somoi	28 days
Anti 20-o turkey-ni jrimani	4.5 – 5(f) 7-8 (m)
Badita somoina bitchi chi.a	24 wks
Palna man.an.i somoi	14-15(m) 17-18(f)
Palani somoio jrimani	7.5 kg (m)5.5kg(f)
Cha.aniko be.en pil.atani	2.7-2.8
Palani somoiona cha.an.i cha.a	24-26kg(m)17-19(f)
Chonmitingo bi.sa sia	3-4 %

1:5 male female ratio at RPBF Kyrdemkulai



TIKKA SU.NA DONGIMIN SOMOI / VACCINATION SCHEDULE IN TURKEY

Bilsi	Tikkani rokom	Route
7 th sal	ND – F1 Strain	Mikrono /Eye drop
10 th sal	IBD Strain	Mikrono/Eye drop
28 th sal	NDVH – Lasota	Mikrono/Eye drop
6 th anti	Fowl Pox	Bigilo/Sub Cutaneous
8 th anti	Cholera Vaccine	Bigilo/ Sub Cutaneous
10 th anti	R2B	Muscle-o Intra Muscular
14 th anti	Fowl Pox	Bigilo/ Sub Cutaneous
18 th anti	RDVK	Bigilo/Sub Cutaneous

DO.BREKROT-KO JILANI

Do.bekrotni gimin uie ra.aní

- Senggnang bria- anti 6 .
- 10gm bi.sani jrima; 200 gm dal.gimin-ni jrima;
- Jilna bang.e biap nanga.
- Asthma sagipana nama ine manderang do.bekrot-ko brea. Aphrodisiac ong.a ineba agana.
- Mande noko jilgipa do.bekrotkode buringo jilna/cha.na mamung champengani dongja.
- Jilgipa do.bekrot, mandena be.en aro bitchiko cha.aní ja.pang ong.e, mongsonggipa ong.a.
- Do.bekrot jilanian da.ode do.oni pal jilna nambatgipa ong.engá.
- Coturnix jatni do.bekrotrang, be.eno man.gipa protein-ni gamchatgipa ja.pang onga.
- Protein bang.gipa cha.aniko man.na neng.mitingo, namgipa quality-ni protein-ko ta.rake bariatna, do.bekrotko jilanian nambatgipa chol ong.a.



Bitchi chi.aní

- Japanese quails chonchongipa bitchirangko chi.a (7-10gms) indiba do.ona bate bang.bata bitchirangko chi.skaa.
- Bimarang anti 6 ong.ahaon bitchi chi.a.
- Namgipa samtangtango, uarang rong 250 bitchirangko ba una bateba bilsisao chi.a.
- Do.bekrotni bitchirangni biking ba.a/nom.a aro altue be.aia.
- Do.bekrot bimarang sal 50 ni gisepon bitchi bon.e chi.na man.a.

Nok rikani/ Housing

- Uarangni nol well name tarigipa, name balwa nanggipa and jenaba jokgipa ongna aro ramgipa from ong.na nanga.
- Do.bekrot mangsa dal.gipa 145cm nol apalaniko nanga.
- Bang.bata somoion, jinmako apsan jilgenchimode , uarang bitip tarija indiba ant.tangtang bitchiko litter-o donnua.
- Ge.gni dolni do.bekrotrangko apsan jilna nangode, uarangko apsan ong.gijagipa katcha ba nol-o jilbo.

Do.bekrotrangko manage ka.anि aro bi.sa pe.atani.

- Do.bekrotrang nom.a. Uni gimin skanggipa anti 2 o, uarangna nambate simsakna nanga.
- Bi.sako donmitingo, ding.anि ko uarangni dakbewalrangko nie taridapna nanga.
- Do.bekrotni bimang chonani gimin, battery brooding-ko anti 3 ona dakanian, uarangko nol-o jilana bate nambata.
- Jilgipa do.bekrotrang anti 10-20 ong.joko reproduce ka.a.
- Bitchi oniko bi.sa pe.atna gitा, bipa mangsa bima mang 1- 3 ko pal ra.na nanga.
- Bipako bimani nolo donatani sal 4 ni ja.mansa, quail bitchiko bi.sa pe.atna chimongna nanga.
- Pe.atnakgipa bitchiko 15.5°C temperature-o aro 80% humidity-o chimonge donna nanga.

Bi.sarangna simsakani

- Do.bekrot bi.sarangko dingtang dingtang dakgipa commercial or game-bird battery brooders-o donna man.a.
- Cha.chakani aro ringchakaniko donna biap 2-3cm and 1-1.5cm apalaniko nanga.
- Coturnix jat-ni bi.sarang grang chakujana kingking brooder-o ding.bataniko nanga. Bi.sarangni nolo temperatureko simsakani , chu.sokgipa nirokna, namen mongsonggipa ong.a.
- Brooder ding.anि, pe.atgipa machine ni ding.anि bate on.tisa komibatna nanga.



Do.bekrotna cha.anि on.anि

- Starter feed 0-3 anti
- Grower feed 4-5 anti
- Layer feed 6 anti-oni
- Dambegipa bi.sarang ta.rake be.en jrima aro uarangni protein and amino acids nangani ia somoio bata.
- Dal.gimin Japanese quail 14-18g dana/feed ko salprako cha.a.

Do.bekrotni sabisirang aro uarangko control ka.anि.

- Do.bekrotrang rang.san sin.a ba ding.aniko chakna amja (mongsongbate skanggipa anti2 ni gisepo).
- Antibiotics sam-ko ia somoio chi-o ba cha.anio on.na nanga.
- Do.bekrotrang mamung tikka ko nangja.
- Aspergillus fumigatus quails-o pneumonia ko ong.ata. Iako control ka.na calcium propionate ko @2kg/tonne dana/feed-o brinna nanga.

- **DO.GEJKO JILANNI BA NIROKANI**

Do.gep jilanio ka.mao janapgimin namgnirang donga.

1. Do.geprang mangprakan bilsiprako do.ona bate bitchirangko chi.a.
2. Do.gep bitchi do.o bitchina bate 15 to 20 gms mang dal.bata.
3. Do.gepna agre simsakna nangja aro watbrange jiloba namen tangna man.aia.
4. Do.geprang an.tangtangna samsirangko cha.ameba cha.aniko sandie cha.na mana. Uarang mi a.bani ga.akgimin mi-rangko, jo.ongrangko , gapchilek, kan.churi, chonchongipa na.tokrang aro gipin chio donggipa bosturangko cha.a.
5. Pale sime cha.ani ba palarangko niatode, do.geprang ruutbata somoina mandena pale lap ong.aniko on.a. Uarang gnigipa bilsionan bang.bea bitchirangko chi.a.
6. Do.geprangna do.ona gita, nambegipa nokrangko rike on.na nangja.
7. Do.geprang mangraka, name bi.sarangko rodila aro sabisirangko man.rongbreja.
8. Chi rikam ba chibolrara dakgipa ba mamungba silgijagipa a.arang jeon do.o ba mamung jila kaaniko dakna man.ja, uandakgipa biaprango do.geprangko jilskana man.a.
9. Do.geprang 95– 98% do.chirangko pringon, 9 AM na skangan chi.ronga, aro indake somoi aro kam ka.aniko ritchengata.
10. Do.geprang gipin jilanirang baksa jilchapna ba integrated farming systems ko dakna namgipa onga jekai do.gep baksa na.tok jilchapani aro do.gep baksa mi-koba ge.chapani. Do.gep baksa na.tok jilgenchimode, do.gepni ki.irang na.tokna namgipa cha.ani ong.a aro na.tokna gipin cha.aniko on.dapna nangja. (200-300 ducks per hectare of waste area). Do.gep baksa mi-ko ge.genchimode, do.gepara ming 4 mongsonggipa kamrangko ka.a jekai hal gama cha.ani sandimitingo, uarangni ku.sikrang a.ako nom.ate, mi baksa chachapgipa samrangko pike gala gita dakata jo.ongrangko cha.e gala aro mi a.palna a.sal ong.ata.
11. Do.geprang alu cha.e nosto ka.gipa jo.ong, gukrangko, gapchilek aro gaprangko cha.e bon.ata. Liver fluke bang.gipa biaprangniko, uarangko cha.e do.geprang biapko namata (2 to 6 ducks per 0.405 hectare of land). Do.geprang ganggu bitchi aro ganggu jo.ongrangko cha.e, uarangko bon.ata (6 to 10 ducks per 0.405 hectare of water surface).
12. Do.geprang gisik seng.gipa ong.a aro uarangko altue bamatna man.a. Uarangko chibolona re.ange, attamo an.tangtangan nokona re.bapilatna ranta ka.na ka.na man.a.

JATRANG/ BREEDS

- Bitchina jilgipa do.geprangonide Khaki Campbell jatni do.gepan bang.bata bitchirangko chi.na man.a.
- Ia jatni do.gep mangprakan bilsigimikan, salprako rongprak bitchiko chi.gipako see rakkianirangko nikna man.a aro uarang bilsio rong 300 na bateba bitchi chi.a.
- Khaki Campbell bimani jrima 2 to 2.2 Kgs, aro biparang 2.2 to 2.4 Kgs mang ong.a.
 - Bitchini dal.a 65 to 75 gms mang ong.a.
- White Pekin do.gepni be.enara cha.tobegipa ong.ani gimin a.gilsak gimiko mingsinga.
 - Iara ta.rake dal.ninga, cha.ani komie cha.a aro iani be.en namen cha.tobea.
 - Sal 42 ni gisepon 2.2 to 2.5 Kgs mang jrima aro cha.aniko be.en pil.atani 1:2.3 to 2.7 Kgs ong.a.



Fig. Khaki Campbell





Fig. White Pekins

BI.SA PE.ATANI

- Khaki Campbell do.gep bi.sa pe.na sal 28 ko nanga.
- Bi.sa pe.atgipa machine-ode temperature of 37.5 to 37.2° C (99.5 to 99° F) o done, bi.sa pe.atgenchimode namgipa onga.
- Thermometer chi nigenchimode, skanggipa sal 25 –o, uarangna on.gipa ding.an 30 to 31o C (86 to 88° F) ong.na nanga aro pe.atna gita bon.kamgipa sal 3-o ding.an 32.7 to 33.8o C (90 to 92° F) ong.na nanga.
- Bitchirangko, 2nd gipa saloni 25th gipa salona, sam bringipa chi bo.omachi satkikina nanga aro komioba adha kantanade ka.sinate rakkina nanga.
- Mombati so.e bitchi nama ba namjako nianiko 7th gipa salo dakna nanga.
- Bitchirangko kantaprakon an.pilrurana nanga.
- Bitchirangko 25th gipa salo pe.atgipa ona ra.baskaa.

BI.SARANGKO BROODER NOKO DONANI / BROODING (0-4 Weeks)

- Khaki Campbell bi.sarangko brooder noko anti 3-4 ona donna nanga.
- Be.en cha.na jilgipa do.gepni jat, Pekin, kode brooder noko anti 2-3 donoba chu.ongai.
- Do.gep bi.sa mangprakna 90 to 100 sq.cms. apale biapko brooder o on.na man.ode nama.
- Skanggipa antio brooder noko, temperature 29 to 32° C (85 to 90° C) ko on.a. Indake antiprako 3°C prak komiate, 4th gipa anti-o 24° C (75° F)temperature ona sokata.
- Do.gep bi.sarangko a.kol-a.kol dakgipa ba wired a.pa-o ba litter angipa a.pao ba battery-chi chalaigipa brooder oba donaia.
- Anti 3 ona kingkingde, net angipa a.pani apalan- 0.046m² (1/2 sq, ft.) ong.ode ba ronggimik dakgipa a.pani apalani 0.093 m² (1 sq.ft.) ong.ode, uan bi.sa mangprakna chu.ongai.
- Chi ringchakanio chi -ko 5 to 7.5 cm (2 to 3") gapesan on.aiode, uara chi ringnamangmangsan chu.ongai, uarangni skoko sim.nade chu.ongja.

JILANI (15-16 Weeks)

- Do.gep bi.sarangko nolo chipkete, ba gisep gisep wate, ba watbrangeba jilna man.aia.
- Nolo chipkete jilode, biapni apalani- $0.279m^2$ (3 sq.ft.) ko mangprakna, anti 16- ona on.bo.
- Gisep gisep wate jilode, bi.sa mangprakna, walo tusina biapko 0.186 to $0.279m^2$ (21/2 to 3 sq.ft) apale on.bo aro a.palo kate rona, mangprakna 0.929 to $1.394 m^2$ (10 to 15 sq.ft.) apale hisape anti 16 na kingkingde on.bo. Weather-o pangchake do.gep bi.sarangko anti 3-4 rangonin wate donna man.a.
- Chi ringchakanio, 12.5 to 15 cm (5" to 6") mang gape chi-ko on.na nanga jedakode uarang an.tangtang skoko sim.bolna man.gen. 60-90cm (2 -3") mang chue nolni ning.o aro a.paloba pakma tarigenchimode ba bera kagenchimode, do.geprangko control ka.na altubata.
- Watbrange jilode, 1000 do.geprangko, 0.405 hectare dal.gipa a.ao jilna man.a.

DO.GEP DAL.GIPARANG (above 17 weeks of age)

- Chipkete jilode, do.gep mangprakna 0.371 to $0.465m^2$ (4 to 5 sq.ft.) biap apale nanga. Gisep gisep wate jilode, do.gep mangprakna $0.279m^2$ (3 sq.ft.) apale walo tusina biapko nanga aro 0.929 to $1.394m^2$ (10 to 15 sq.ft.) apale, a.palo kate rona tariode, uan chu.ongaia.
- Dim.e ba sosiate cha.ani on.ode 'V' shaped cha.chakanio on.na nanga aro 10 to 12.5 cm. (4 to 5") apale, onchakram biap ko mangprakna on.na nanga indiba ran.e ba pellet tarigipa cha.aniko on.ode, onchakram biap - 5 to 7.5 cm.(2 to 3")an mangprakna chu.ongaia.
- Bang.e bitchi chi.gipa do.geprang, anti 6-18 rangon bitchi chi.na a.bachenga. 95 to 98% bitchirangko pringon 9AM na skangan chi.a. Ge.sa do.gring 30x 30 x 45 cms.(12 x12 x18")size nian do.gep mang 3 na chu.onga. Bitchi chi.gipa do.gep bima mang 6-7 na, bipa mang 1 an chu.onga aro be.enna jilgipa do.gep bima mang 4-5 na bipa mang1 ko nanga.
- Salni teng.aniko, salprako, kanta 14 to 16 man.ode, do.gepni bitchi chi.ani baria.
- Wate jilode, 1000 do.geprangko 0.405 hectare (1 acre)apalgipa a.ao jilna man.a. (tangsekipa sam-bolo pangchake).

NOL RIKANI /HOUSING

- Do.geprangna agre namgipa nokrangko nangja.
- Nok name balwa nanggipa, ran.gipa aro mese napna man.gijagipa ong.na nanga.
- Nokkingde chapra dakgipa, nokking jangchi chugipa ba adha boromgipa ong.na man.aia.
- Nokni a.pa ba floor net dakgipa ba gimikko pindapgipa rakgipa floor ong.na nanga.
- Net dakgipa floor-kode bitchi chi.gipa do.geprangna jakkalja.
- Gisep gisep wate jilode, do.geprangna a.palo kate rona chu.onga gita biap dongna nanga maina uarang salode, sinkarioba ba mikka waoba a.palo rona namnikbata.
- Walo tusigipa aro a.palo kate rona tarigipani proportion 1/4:3/4 ong.a.
- Chi name jokgalna man.na gita, do.gepna a.palo kate rona tarigipa on.tisa ka.machipak slope ong,na nanga.
- Joksimaigipa chi-niko 50cm (20") apale and 15-20cms. (6-8") tu.e, water channel ba nala dake tuchakna tarigipa nokni sambeng ge.gnion tarina man.ode nama (bitchi chi.gipa do.gepna).
- Do.gepara chi-ni do.o ong.oba aro uarang chi-o rona namnikoba, do.geprangna jroe rona chibolko nangchongmota indakede ong.ja.

- Indiba, uarangni chi ringchakanio on.gipa chi, do.geprangni be.en gimikko sim.na man.jaoba, skoko sim.namangmangde chu.onge gapna nanga. Indake uarangni skoko uamang sim.na man.jaode, uarangni mikronrang rikap rikap dake, ja.mano breta aro agreahaode, basakobade mikron kana ong.a. Una agreba, do.geprang an.tangtangni ku.sikko su.galna namnika.
- Chi jrona man.gipa, be.enna jilgipa do.geprang, chi jrona man.gijagipa do.geprangna 0.3% bate jrimbata indiba bitchi chi.na jilgipa do.geprang chi jrona man.ani ba man.gijani mamung dingtangani dongja ine nikna man.a.

CHA.ANI ON.ANI

- Do.geprangna ran.gipa cha.ani ba dim.gipa cha.ani ba pellet tarigipa cha.anikoba on.na man.a indiba uarang ran.gipa cha.aniko minokna neng.ani gimin dim.gipa cha.aniko namnikbata.
- Pellet tarie cha.ani on.ode, dam raka indiba pellet tarie on.ode, cha.aniko komikale on.na man.a, bang.e galani dongja, kam ka.aniko ritchengata, altubata aro rongtale on.na man.a.
- Do.geprang samsiko sandie cha.na namnika.
- Wate jilode, do.gepko pokkrio watna man.ode aro tangsek samsirangko on.na man.ode, cha.ani on.anio koros komia.
- DO.GEPRANGNA CHI GRI MAMUNG SALOBA CHA.ANIKO ON.NA NANGJA.
- Skanggipa anti 8 nade, uarangna sika gita cha.na, cha.aniko chu.onge on.na nanga indiba uni ja.mande sal-o chang2 dake, pring aro attamo on.na man.a.
- Khaki Campbell do.gep, 12.5 Kgs. danako anti 20 ona cha.a.
- Uni ja.mande, tangsekkipa sam-bol on.ao pangchake aro bitchi chi.anio pangchake, 120 gms cha.aniko mangprakna on.na nanga.

Tikka su.na dongimin somoi / Vaccination Schedule

Sl n o	Bilsi	Tikkani bimung	Dos e	Rout e
1	3 – 4 gipa antio	Duck cholera	1 ML	Bigilo (S/C)
2	Skanggipa tika su.anj jasani ja.mano.	Duck cholera	2 ML	Bigilo (S/C)
3	8- 12 gipa anti	Duck Plague	1 ML	Bigilo (S/C)