

Then

# 1

## **POULTRY INDUSTRY**

---

### **BUNG 1**

**Poultry Farm chanchin tlangpui thlirna** **5**

---

### **BUNG 2**

**Arvulh dan kawng hrang hrang** **19**

---

### **BUNG 3**

**India ram chhunga Poultry hmasawna atana  
remruatna te** **37**

---

---

## PROGRAMME DESIGN COMMITTEE

---

Dr. P.C. Lalsangzuala, Manager, Poultry Farm,  
Department of Animal Husbandry and Veterinary  
Government of Mizoram, Selesih  
Aizawl – 796 014 (Mizoram)

Dr. V.R. Hingane, Director, Dr. B.V. Rao Institute  
of Poultry Management and Technology  
P.O. Uruli, Kanchan - 412 202  
Pune District (Maharashtra)

Dr. H.P. Shrivastava, Principal Scientist and Head  
Post Graduate Education and Training Section  
Central Avian Research Institute (CARI)  
Izatnagar, Bareilly - 243 122 (Uttar Pradesh)

Dr. P.V.K. Sasidhar, Scientist - Senior Scale  
(Veterinary Extension), Technology Transfer Section  
Central Avian Research Institute (CARI)  
Izatnagar, Bareilly - 243 122 (Uttar Pradesh)

Dr. Asha Rajini, Professor, Department of Poultry  
Science, Madras Veterinary College  
Vepey, Chennai - 600 005 (Tamil Nadu)

Dr. D. Narahari, # 31/15, 3<sup>rd</sup> Floor  
East First Main Road, Shenoy Nagar  
Chennai - 600 030 (Tamil Nadu)

**Programme Coordinator : Dr. P. Vijayakumar**  
**Course Coordinator : Dr. P. Vijayakumar**  
**Programme Proposer : Dr. S.R. Zonunthara**

Dr. Niranjana Kalita, Associate Professor  
Department of Poultry Science  
College of Veterinary Science  
Assam Agricultural University  
Khanapara, Guwahati – 781 022 (Assam)

Dr. Jayasree Kurup, Deputy Director  
EDNERU, IGNOU, New Delhi – 110 068

Dr. S.R. Zonunthara, Regional Director  
IGNOU Regional Centre  
Aizawl – 796 001 (Mizoram)

### Faculty, School of Agriculture, IGNOU

Prof. B.S. Hansra, Director

Dr. M.K. Salooja, Professor

Dr. S. K. Yadav, Reader

Dr. P.K. Jain, Assistant Professor

Dr. P. Vijayakumar, Assistant Professor

Er. Mukesh Kumar, Assistant Professor

Dr. Mita Sinhamahapatra, Assistant Professor

Dr. Pooja Riat, Junior Consultant

---

## BLOCK PREPARATION TEAM

---

### Unit Writers

Dr. Asha Rajini, Professor, Department of  
Poultry Science, Madras Veterinary College  
Vepey, Chennai - 600 005, Tamil Nadu (Unit 1)

Dr. Niranjana Kalita, Associate Professor,  
Department of Poultry Science, College of  
Veterinary Science, Assam Agricultural University  
Khanapara, Guwahati-781 022, Assam (Unit 2)

Dr. P.V.K. Sasidhar, Scientist - Senior Scale  
(Veterinary Extension), Technology Transfer Section  
Central Avian Research Institute (CARI)  
Izatnagar, Bareilly - 243 122  
Uttar Pradesh (Unit 3)

**Block Coordinator : Dr. P. Vijayakumar**

### Editors

Dr. H.P. Shrivastava, Principal Scientist and  
Head, Post Graduate Education and Training  
Section, Central Avian Research Institute  
(CARI), Izatnagar, Bareilly - 243 122  
Uttar Pradesh

Dr. P. Vijayakumar, Assistant Professor  
School of Agriculture, IGNOU  
New Delhi – 110 068

### Translation (Mizo Language)

Dr. P.C. Lalsangzuala  
Farm Manager, Poultry Farm  
A.H. Department, Mizoram

### Editor

Dr. Lalnunluangi Hmar  
Associate Professor, College of Vety. Science  
Aizawl, Mizoram

---

## MATERIAL PRODUCTION

---

Mr. Rajiv Girdhar  
Section Officer (Publication)  
SOA, IGNOU

### Proof Reader

Dr. M.C. Lallianchunga  
Associate Professor, College of Vety. Science  
Aizawl, Mizoram

March, 2010

© Indira Gandhi National Open University, 2010

ISBN: 978-81-266-4533-6

All rights reserved. No part of this work may be reproduced in any form, by mimeograph or any other means, without permission in writing from the Indira Gandhi National Open University.

Further information on Indira Gandhi National Open University courses may be obtained from the University's office at Maidan Garhi, New Delhi-110 068 or the official website of IGNOU at [www.ignou.ac.in](http://www.ignou.ac.in).

Printed and published on behalf of the Indira Gandhi National Open University, New Delhi by Director, School of Agriculture.

Laser typesetted at Graphic Printers, 204, Pankaj Tower, Mayur Vihar, Phase-I, Delhi-91.

Printed at :

Huan lo ram hnathawktu te zingah chuan arvulh hi hna peng khat pawimawh tak mai a ni a. Kan ramah chuan ei in kawng lo danglam tak avang te, sum leh pai dehchhuahna kawngah te, thiamna hmanga khawvel lo zim zel avang te leh, thilsiam lama hmasawwna chak tak avang te leh, sum leh pai dehchhuah lo pung chho zel leh khawpui lo pungchho chak tak te avang hian arvulh lamah hmasawwna nasa tak hmel hmuh tur a awm phah a. Randang vulh te khaikhin chuan arvulh hian heng avang te hian hmun pawimawh zawk a chang chho zel a, chungte chu artui leh a sa avanga chaw tha tak mai protein kan hmuh avang hian, ei chhiat avanga natna thlenna leh retheihna umbo kawngah te leh hna nei lo leh hna mumal lo thawkte chhawktu a lo ni chho ta a ni. Chutih laiin, tunlai thiamna tharlam ber te hriatna lam tlakchham avang erawh chuan, kan ranvulhtu te hian anmahni kutkawih thiamna hmangin ran an la vulh zel a, chu an lo tih thandan erawh chu thawh hlawklo tak leh tamtham taka ran han vulh nana tangkai lo tak a ni lawisi a ni. Chuvang chuan, arvulh lama hlawhtlinna nei tak tak tur chuan arvulh lama thiamna kawng hrang hrang te neih chu tih makmawh a lo nit a a ni. Chutiang thiamna nei tur chuan a hmei a pain he zirlai “Certificate in Poultry Farming” Programme hi zawm ngei chi ani ang.

**Then 1 “Poultry Industry”** han tih hian India rama arvulh dinhmun leh a kaihhnawih te a kawk deuh ber a. He zirlaiah hian arvulh kawnga thumal pawimawh hmanbik leh hrilhfiahna te thlurbing a ni dawn a ni. He zirlai bawkah hian India rama poultry farm hrang hrang awm te viz: Ar, Varak, Emu, Geese, Ostrich, Partridge, Pheasant, Peafowl, Vahmim leh Sai Ar te an vulh dan kimchang a theih angin a huam bawk dawn a ni. Arvulh dan kawng hrang hrang te he zirlaiah hian tarlan a ni dawn bawk a ni. He zirlaiah bawk hian arvulh kawnga zir bingna hmun hrang hrang, ar vulhtute tana training pe thin te leh hmasawwna tharlam leh hmuhchhuah thar neih tumna lama hnarkaitute chanchin tarlan tum a ni bawk. Ruahmanna hrang hrang leh hamthatna awmthei kawng hrang hrangte, Sorkar lam leh chutiang kawhhmuh thei pawl dang te, arvulhtute tanpui thei tur chanchin te pawh hetah hian hriat theihin a awm bawk dawn a ni.

**Then 2 “Biology of Poultry”** hian ar chibing larzual te, ar lam chi hrang hrang thlah hrang leh pian hrang chanchin te min hrilh dawn a ni. Hetah hian ar thliarhran an nih dan azirin leh an tobul azir leh an tangkai dan leh hlutna te thlurbing a ni ang. Ar, varak leh sai ar te hmel landan bik leh an thlalak te he zirlaiah hian sawifiah a ni ang. Taksa peng hrang hrang heng ruhrel, tihrawl, thawkna kawng, chaw kawng, thisenzam, inthlahchhawn na lampang te leh a dangte an awm a, hengte hian ar thanna kawngah leh hriselna vawnthat kawngah hnathawh pawimawh tak an nei a ni. Heng taksa bung hrang chanchin leh an hnathawh te kimchang takin he zirlaiah hian tarlan a ni bawk. He zirlai hian inthlahchhawn dan hmang leh dehchhuah tam phah zawkna atana ar tihral dan phung te min kawhhmuh bawk dawn a ni.

---

# THEN 1 POULTRY INDUSTRY

---

India ramah poultry industry hian thingtlang arvuah atanga tanin mumal taka thiamna hmanga arvuah a rawn thleng chho va, chu chuan hna tam tak a siamin retheihna leh chaw tha tlakchham natna nasa takin a umbo a ni. Ei leh bar kawngah kumtin hmasawna za a 1 atanga 2 hmuh a nih laiin, artui leh broiler tharchhuah kawngah chuan kumtin zaa 8 atanga 10 a tling pha a ni. Kum 1971 ah khan artui 5 billions leh broiler maktaduaih 4 tharchhuah a ni a, kum 2006-07 ah erawh chuan nasa taka hma sawnin artui 45 billions leh broiler 2.1 billion tharchhuah a lo ni thei ta a, chu chuan India chu artui dehchhuah kawngah pathumna a rawn nihtir thei ta a ni (China leh USA dawt ah) tin, khawvelah broiler tharchhuah kawngah pangana a lo ni thei ta bawh a ni (USA, china, Brazil leh Mexico te dawt chuan).

Kum sawmbi tlem kal ta chhung khan, poultry industry hian hmelthar nasa takin a thlak a, tunah chuan ei leh bar zawn kawnga hmun pawimawh tak luah a lo ni ta a ni. A hmasawna zel tur leh hlawhtlin chhohna atan erawh chuan thiam zawkna nei leh thathawh thei zawk thalai te chungah inngahna nasa tak a nei thung a ni. Tunlai chuan arvuah ten ar chithlah siam chawp an than chak zawk avang te, an dam that zawk avang te leh hlawk zawkna avangin an lo vuah uar ta zawk a ni. Central leh State sorkar leh poultry cooperatives te hmalak na avangin arvuah kawngah hmasawna nasa tak hmuh a ni a. Broiler leh layer vuah kawngah a rampum huap ang pawhin ngaihtuahna pek nasat chhoh a lo ni ta zel a, churang chuan hei hian hun lo la awm zel turah beiseina nasa tak leh hmathlir duhawm tak min neihtir a ni.

**Bung 1** ah hian “**Poultry Farm chanchin tlangpui thlirna**” tarlan a ni anga, arvuah hian ranvuah leh ei leh bar kawnga hmalakna ah thang chakber nihna a hauh chho ta a. Tin, chawtha protein, artui leh arsa atanga hmuh kawngah nasa takin hma a hruai bawh a ni. He zirlai ah hian Indian poultry industry chanchin kimchang a dinhmun, a tha chak zawng leh a hlawhtlinna te tarlan a ni ang. Chubakah thumal har leh hrilhfiah na dang tam tak arvuah kawnga hman lar te hrilhfiah an ni a nga, chung te chu arvuah kawnga hriattur pawimawh tak tak te an ni hlawm a ni.

**Bung 2** chu “**Arvuah dan kawng hrang hrang**” lampang hawi zawng a ni ang. He zirlai ah hian arvuah hrang hrang viz; Ar pangngai, varak, emu, geese, ostrich, partridge, pheasant, peafowl, vahmim, swan leh sai ar, kan rama vuah ang chi te chanchin tarlan a ni dawn a ni. Arvuah dan kawng hrang hrang heng; thingtlang arvuah, tam tham taka vuah, a chithlah vuah leh vuah pawlh ang chi te chanchin tarlan a ni bawh dawn a ni.

**Bung 3** ah chuan “**India ram chhunga Poultry hmasawna atana remruatna te**” tih sawifiahna a awm ang a. Zirna in, sorkar hmachhawp leh poultry cooperatives India rama poultry industry hmasawna atana tha thawhtute chanchin he zirlaiah hian thlurbing an ni ang. He zirlaiah tho hian poultry farming dinhmun leh pawimawh na thlirzauna neih a ni anga, arvuah hian engtiang taka thingtlang mite khawsak chawikan kawngah tha a thawh ve tih te thlir ho a ni dawn a ni.

---

# BUNG 1 POULTRY FARM CHANCHIN TLANGPUI THLIRNA

---

## Ruangam

- 1.0 Athiltum
- 1.1 Thukamkeuna
- 1.2 Indian Poultry Industry
  - 1.2.1 India rama Poultry population
  - 1.2.2 Poultry Industry dinhmun
  - 1.2.3 Poultry Industry thachakna
  - 1.2.4 Poultry Industry hlawhtlinna
- 1.3 Thumal hman leh a hrihfiahna
- 1.4 Khaikhawmna
- 1.5 Thumal hman leh a hrihfiahna
- 1.6 Lehkhabu chhiarbelh atana rawnte
- 1.7 Lehkhabu rawnte
- 1.8 Ihmasawmna enfiah nana chhanna te

---

## 1.0 ATHILTUM

---

He zirlai zir zawh meuh chuan hengte hi i lo ti thei tawh ang;

- India rama Poultry Industry tha chakna leh hlawhtlin na tlangpui hriatna; leh
- Poultry farming hawi lama thumal hman lar hrang hrang sawifiah theihna

---

## 1.1 THUKAMKEUNA

---

He zirlai hlawm khatah hian, poultry industry chanchinah ngaihdan Chiang Kuang tak, he industry ah hian i la intulut lo emaw i intulut hle tawh pawh a ni mahna, i nei thei dawn a ni. Arvulh chanchin leh poultry industry chanchin hrim hrim zir hi thil tuiawm tak mai a nih bakah thil bengvar thlak tak a ni ve reng a ni. He thumal “**Poultry**” han tih hian ar lam chi kan vulh theih ang chi heng; ar pangngai, varak, emu, geese, guinea fowl, ostrich, parva, vahmim leh sai ar te hi a huam a ni. Arvulh hi hmakhawsang atanga hriat lo ni tawh mahse, India ramah chuan tamtham tak, eizawmna tling khawpa kan vulh tan chu kum 40 vel kal ta mai atang khan a ni. Artui tam chi hi India ramah kum 1955 ah lakluh ani a, Broiler hi kum 1961 ah lakluh a ni ve thung a ni.

India ah hian arvulh hi ei leh bar kawng zawmna hrang hrangah a thang chak ber a ni a, artui leh arsa atanga chawtha protein mihringin kan hmuhna liantham tak a nih phah a ni. Sa atanga dehchhuah chawtha zingah ar atanga chawtha hmuh hi duhthusam ber pawl a ni. Sa kg10a rit rau rauah, arsa hian protein heng; vawksa, bawngsa leh beramsa ai te hian a pai tam zawk em em ani. Chuvang chuan, arvulh hian khawvel khawsak inlumlet chho zelah hian nasa takin kawngro a su tih a hriat theih a ni.

Kum 30 kal taa arpuiin artui 240-250 a tui theih laiin, tunlai arpui te chuan kum khat chhungin artui 310 lai mai an lo tui thei ta a. Kum 1980 bawr chho kha chuan broiler te khan a tlangpuiin kg 1.5 lek a rit kar 8 a upa ah an ni theiin an feed conversion ratio (FCR) pawh 3.0 vel lai a ni. Tunah erawh chuan, kg 1.8-2.0 lai leh FCR 1.6 to 1.8 ni 38 (kar 6 vel) a upa an nih lekin an ni thei ta a ni.

## 1.2 INDIAN POULTRY INDUSTRY

Kum 30 vel kal ta mai atang khan poultry industry hi a rawn thang duang chho hle a, zirbing na rah chhuah leh sorkar leh pawlho tha thawh a zarah thingtlang arvulh dan atangin tamtham leh hlawk zawkin arvulh chhoh a lo ni ta a ni.

### 1.2.1 India rama Poultry population

Tunah chuan poultry han tih hian ar pangngai, varak, vahmim, sai ar etc. ang te a huam tih i lo hre ta a, tun dinhmunah chung ar belhkhawm chu India ramah hian enzatzge ni ang tih i hria em? India rama poultry population leh tun dinhmun chingkuang takin he zirilaiah hian tarlan a ni dawn a ni.

India hian ranvulh atangin thingtlang khawsak tih hmasawn kawngah pawimawh na nasa tak mai a nei a. India ah hian ar lam chi maktaduai 489.01 a nei a, varak neih tamah 4na leh ar pangngai neihah 5na khawvelah a ni bawk. Ar pangngai hi ar lam chi vulh zingah a tam ber a, ar lam chi za zela 92 lai chu ar pangngai te an ni. Ar pangngai hian India rama zirbingna leh hmasawna atana ruahmanna kawng hrang hrangah ngaihsak a hlauh bik em em a ni. Chumi avang tak chuan arvulh lama eizawna hi a ropui mai piah lamah Indiaah chuan a tha ber mai e, a lo tih chhoh theih ta a ni. Ar lamchi zingah varak hi za zel a 7 a tlingpha a, varak te hi tuipui kam leh dil leh lui tamna state; Andhra Pradesh, Assam, Jammu and Kashmir, Kerala, Orissa, Tamil Nadu, Tripura leh West Bengal ah te hmuh an ni deuh ber a ni. Varak vulh hi hmanlai thingtlang vulh anga vulh a la ni deuh ber a ni, thazawk lem lo mahse, tual ar ang chi varak te hi a chi tha ai chuan vulh uar an ni zawk hrih a ni. Vahmim sa leh a tui te pawh an lar chho ve zel a. Vahmim vulh lamah phalna lak te a lo ngaih thin avangin hmasawna a awm hlei thei lo hle a, chubakah a vulh hautak vang leh a chi tha hmuh a harsat avangin vahmim vulh hian hma a sawn hlei thei lo ve bawk a ni. Emu, guinea fowl, ostrich leh sai ar vulh kawngah chuan nuam tih vanga a kahpaha vulh an la ni deuh ber a, sum hmuh nana tamtham taka vulh chho tur chuan kawng thui tak zawh a la ngai a ni.

### 1.2.2 Poultry Industry dinhmun

India hi artui thar tam kawngah khawvelah 3na China leh USA dawtah a ni pha a, kum 2006 khan 45 billion tharchhuah a ni. State heng: Andhra Pradesh, Haryana, Maharashtra leh Tamil Nadu te hi artui tharchhuak tam state te an ni a, kan ramin artui a dehchhuah za zela 60 lai hi heng hmun atang te a tharchhuah an ni. Kan ram chhim lamah mi pakhat zelin artui 57 leh arsa 500g kumkhat chhunga ei ang an nih laiin, hmarchhak lamah chuan mi pakhatin kum khatah artui 18 leh arsa 130g chauh ei ang kan ni.

Arsa thar tam lamah India chu kum 2006 khan 5na a ni a, USA in a thar tam ber a, chumi dawtah China, Brazil leh Mexico te an ni. India hian arsa tharchhuah kawngah kum 1961 a arsa 81,000 tones a tam a tharchhuah laiin kum 2006ah meuh chuan a let 18 zeta tam 2.1 million a tam arsa a rawn tharchhuak thei tawh a ni. Andhra Pradesh hi broiler vulh tam ber a ni a, a dawtah chuan Tamil Nadu, Maharashtra, Punjab, West Bengal leh Karnataka te an ni. Za zela 65 aia tam zet mai broiler te chu Indiaah heng state atang te hian tharchhuah an ni.

### 1.2.3 Poultry Industry thachakna

India chu artui leh arsa tharchhuah tam lamah pathumna leh pangana an ni tih i lo hre ta a. Hetiang dinhmun a lo nih theih chhan kawng hrang hrangte chu a hnuaia tarlan ang hi a ni:

- 1) Broiler leh arpui tui tam chi siamchhuah zel a nih vang te.
- 2) Hrivenna man tlawm zawka siamchhuah a nih vang te.
- 3) Ar vulhtuten an duhthusam anga pawl pakhat National Egg Co-ordination Committee (NECC) kal tlanga artui man an bithliah theih avangin.
- 4) Arvulh lama ruahmanna sumfaia tanpuina avangin.

**1.2.4 Poultry Industry hlawhtlinna**

India rama Poultry Industry hlawhtlinna kawng hrang hrang te chu:

- FCR hmasawna, chitha vawn, enkawl dan hmang hmasawn na.
- Ranchaw sawngbawlna lama hmasawna thar.
- Ranchaw chawhpawlh tur tharlam dehchhuah leh lakkhawm.
- Ar chithlah tha zawk.
- Ar chithlah man leh ar tui tamchi man mumal taka bithliah na.
- Pellet feed uar chhoh alo ni.
- Archawa pawlh chi viz. enzyme, pro-biotics lo awm ta te.
- Pawl intelkhawm helam hmasawna kawnga ngaihtuahna seng te.
- Archaw hmun tin maiah hmuh tur a lo awm ta te.
- Chaw sawngbawl sa lo tam ta te.
- Ar chi tha tui ngei tih hriat lo tam ta te.
- Rampawna thawnchhuah khawp lo awm ta te.
- Natna zawnchhuah kawngah leh a tihdan hmanga hmasawna lo awm ta te.

**I hmasawna enfiah rawh 1**

**Note:** a) I chhanna te ziah nan a hnuai hmunawl hi hmang rawh.  
b) I chhanna chu zirlai tawp lam atang khan endik ang che.

1) He thumal ‘Poultry’ hi eng tihna nge?

.....  
.....  
.....  
.....

2) Khawvelah India hi artui leh arsa tharchhuah tam lamah engzatna nge?

.....  
.....  
.....  
.....

3) India rama Poultry Industry hlawhtlin na ziak chhuak rawh.

.....  
.....  
.....  
.....

**Tihtur 1**

In thenawm chhungkaw tlem tlawh la, ar lam chi an neih ang angte ziak chhuak la, kum khat chhunga mi pakhatin artui leh arsa an ei zat leh artui leh arsa ni khata an tharchhuah zat te zawt chhuak la, chhinchhiah rawh.

.....  
.....  
.....

**1.3 THUMAL HMAN LEH A HRILHFIAHNA**

Thiamna hmanga arvulh hi hna peng khat mai a ni lova. Mithiam, thiam bik thil nei leh farming chung changa hriatna neih a tul em em a ni. Poultry farming chungchang sawi lai hian thumal thenkhat vawi tam tak lamrik a ni thin a. Chung thumal thenkhat te chu henge hi an ni:

**Ad lib (Latin):** *Ad lib* (duhtawka chawpek) a awmzia chu duhthala tam tihna a ni. Chaw pek a tam thei ang ber duhthala thlan tur awm sawi nana hman a ni ber thin. Hnathawktu tih tlem nan a tha a, arten an duhtawka tam anmahniin an ei mai thin a ni.

**Age at sexual maturity:** Arten artui an thlahu hmasak ber laia an upat dan emaw, za zela 5 te an tui tan laia an upat zawng sawina a ni ber a. Sexual maturity tih chu hun reizawnga nizat a chhiarin an keu atanga artui hmasaber an thlahu inkar reizawng sawina a ni a, tin, 5% ten artui an thlahu laia an upat zawng sawina a ni thei bawk. Arpui chu a tui hma poh leh an tui tam dawn tihna a ni a, an tui hma chuan duhthusam a ni a, mahse an tui hma lutuk erawh a tha chuang lo a ni. A chhan chu artui pum a tet (peewee eggs) thin vang a ni. Artui te chu a man a tlem bakah prolapse (chhul hmawr rawn tawlh chhuak) a tam phah thei a ni. Ar pumraw te Leghorn ang chite chu ar pumraw lian chite ai chuan an puitling hma zawk a ni.

**Artificial Incubation:** Hetah hian, khawl incubator tia hriatah artui awpkeu thin a ni.

**Articial Insemination:** Hei hi arpa chi arnu chhul kawnga darthlalang thei hmanga dah luh sawina a ni (Fig.1.1). Arpa pakhat atangin 0.5 to 1.0 ml a chi (Fig.1.2) an taksa rihzawng azirin a lak theih a ni. Arnu pakhat zel atan arpa chi chu 0.05 to 0.10 ml a tawk thei a ni.



Fig. 1.1: Ar nu a AI tihlai



Fig. 1.2: Arpa atanga archi laklai

**Automation:** Hei hi mihring tha leh suangtuahna hmang lova khawl hmanga hnathawh sawina a ni.

**Beak trimming (Debeaking):** Chemte hriam tak (Fig. 1.3) hmanga ar hmui a chunglam emaw a hnuailam emaw tan thena, chumi hnu a thir sa hmanga dehsak leh sawina a ni. Hei hian archaw riral tur leh inchuk a titem thei a ni.





Fig. 1.3: Debeaker hmanga hmui tan lai

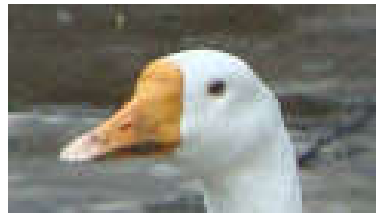


Fig. 1.4: Varak hmui

**Bill:** Varak emaw geese emaw hmui sawina ani (Fig.1.4).

**Bio-security:** Ar rual natna hrik emaw natna laka venhim kawng sawina a ni. Thuang thum atanga natna venkawnga thil pawimawh tak kawngkhat a ni. Bio-security han tih hian heng natna thlen theitu hrik (bacteria, fungi, parasite, virus) leh rannung te tak te ho, sazu lam chi, ram sava ten arah natna an thlen loh nana ven emaw tih hlum emaw a huam a ni. Bio-security han tih chu a awmze tlanglawn maiah chuan thilnung tana himna tiin a sawi theih awm e, farm mal chhungah emaw farm leh farm inkarah emaw natna thlen theitu tihlem emaw a darhzau zel tur ven dan kawng hi hei hian a kawk deuh ber a ni.

**Breed:** Ar rual khat, species pakhat chhunga mi ni si, pianhmang inang nei leh an fate thleng pawha an pianhmang inang chho zel sawina a ni.

**Broiler (Frier):** Ar la puitling lo, kar 6 vela upa, a nu emaw a pa emaw, a sa no leh nem tak nei, vun leh awmruh mam tha tak nei sawina a ni.

**Brood:** Arnote rual khat hunkhata keuho sawina a ni (Fig 1.5).



Fig. 1.5: Nikhata upa arnote



Fig. 1.6: Arnote awplumtu (Brooder)

**Brooder:** Thir emaw thing hmanga hmanraw siam, arnote tihlum nana hman hi a ni (Fig. 1.6).

**Brooder chick:** Arnote kar 0 to 8 a upa sawina a ni.

**Broodiness:** Arpui a lo tui tawpa, a tui te chu awpkeu tuma a awp sawina a ni.

**Broody hen:** Arpui a tui awpkeu tuma awp sawina a ni.

**Cages:** Ar vulhna in thir leh thirzai char belhbawm atanga siam, chhawng hnih chhawng thuma sanga chher chhuan. Example: California (Fig. 1.7) leh Battery Cages (Fig. 1.8).



Fig. 1.7: Californian Cages



Fig. 1.8: Battery Cages

**Candling:** Artui chhnglam that leh thatloh hriat nana kaw te tak te kaltlanga eng hmanga endik sawina a ni. Hemi hmang hian a kawr that dan, a chhnga arnote thanlen dan te a zirchian theih a ni (Fig. 1.9).



Fig.1.9: Mass candling of eggs

**Cannibalism:** Nungchang that lohna (Vice) hi arah engtiklai pawha awm reng thei a ni a. Hetiang a lo awm chuan mawng leh taksa peng danga inchuk te an ching a, hei hi in tawt lutuka dahah te, eng pek tam lutukah te, an chet that tawk loh vang te leh an chawei that tawk loh vang tein a awm thei a ni. Hei hi a chhan zawn chhuaha, a tul anga hmalak thuaiin a tih reh theih a ni.

**Capon:** Arpa a tilmu paihsak thla 8 atanga thla 10 aia naupang sawina a ni a, hetiang arpa chu an sa a nemin a no a, an vun a nem tha a, a sa ei atan a tha hle a ni.

**Chick:** Arnote nikhat atanga kar ruk emaw sarih emaw a upa sawina a ni (Fig. 1.10).

**Chicken:** Kan ar pangngai vulh larber ang hi a ni.

**CLFMA:** Compounded Livestock Feed Manufacturers Association of India.

**Clutch:** Artui arpui pakhat atanga nizawna bahlah miahlova tuizat sawina a ni.

**Coccidiosis:** Natna hrik coccidia ten natna an thlen, kawthalo leh an ek thi a, thisen hloh leh thihna thlen thei bawk natna a ni.

**Cock (Rooster):** Kumkhat aia upa arpa vun thap hreih hrawih tawh, vun fei tawh tak, a sa pawh duk lam tawh, a awmruh pawh chang tha tawh tak, a sa ei atana vulh hi a ni.

**Cockerel:** Arpa tuai kumkhat hnuai lam a sa ei atana vulh.

**Comb:** A pianzia leh a lenzawng inang lo thluah, ar lu chung a taksa peng hi a ni (Fig. 1.11).



Fig. 1.10: Arnote

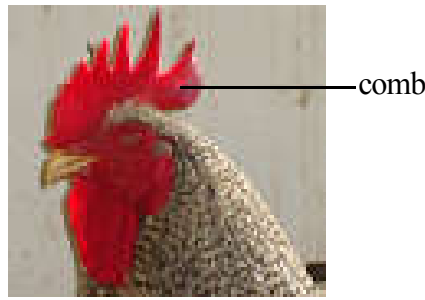


Fig. 1.11: Ar chhuang

**Coryza:** Thawk nana hman taksa peng thenkhat, hnarkua leh lu a awm sinus angte leh mit a that lohna thlen thin natna hming.

**Croiler:** Hei hi broiler chikhat hmul rawng nei a ni a. Barred Plymouth Rock, Dark Cornish, New Hampshire leh Sussex breeds inthlah pawlh tir atanga siamchhuah a ni. Broiler te nen khaikhin chuan croiler te hi an thang muang zawk a, an chaw ei pawh a nih tur angin an thatpui lo zawk deuh. Chuvang chuan, thingtlang arvulh atan leh tlat chhuahna siamsaka vulh atan an tha hle a, ar in chhunga khungbeh tlat vulh ai chuan chutianga vulh chu an tha duh zawk mah a ni. An thang muang deuh e timah ila, kar 8-10 a upa an nih in 1.5 kg a rit an ni thei a, hetih chhung hian FCR pawh 2.5-3.0 a ni. Broiler ai chuan a man pawh a sangzawk thin a ni. Indiaa kan neih croiler chi hrang hrang te chu; Giriraja, Nandanam Chicken II leh Vanaraja te an ni.

**Culling:** Ar tha lo leh duhthusam tawh lo tihral hi a ni. Ar chu vulh chhan hrang hrang artui atan emaw a sa ei tur atan emaw entir siakna atana vulh tur emaw an nih a, chutianga vulh chhan an nih ang tur an phak tawh loh chuan tihral an ni tawh mai thin. He tihdan hman hi a pawimawh hle a, poultry farm ah hlawk zawka ar vulh a nih theih nan chuan kumtluana thil tih makmawh a ni.

**Deep litter:** Ar in chhunga ar vulhte khungbeh tlat hi a ni. Ar in chhuat phah a tan chuan heng hmanrua; phuai, coconut kawr leh fawvaihram etc. angte hman a ni thin (Fig. 1.12).



Fig.1.12: Deep litter system a arvulh

**Delouse:** Arhrik tihrem tumna.

**Desi fowl:** Tual ar, chihlang nilo, lenzawng, pianhmang, rawng leh taksa pianhmang inang lo tak tak an ni a. Hengte hian an tui an awpkeu tha duh em em a ni.

**Deworming:** Damdawi hmanga rulh ut, kawchhunga mi tihbo emaw tihlum emaw sawina a ni.

**Disinfection:** Natna alo thlen hnua natna tih tlakhniam nana hmalakna hi a ni. Damdawi emaw hmanraw hmang emawa tih a ni thin.

**Downtime:** Ar in khat ami ar rual khat tih ral hnu leh a thar lakluh an nih inkar chhung sawina a ni. Ar rual hnih inthlak thleng chhung, ar in tih ruah a, tih thianghlim te hemi chhung hian tih a ni thin.

**Drake:** Varak pa puitling.

**Dressed bird:** Ar puah tawh, a hmul leh ke leh lu te pawh paih tawh hnu hi a ni. Tawngkam dangah chuan, chhum mai theih a peih tawh arsa tihna a ni.

**Dressing percentage:** Ar puah hnu rihzawng, an nun laia an rih zawnga sem, chumi chu 100 a puntir leh tur ani.

$$\text{Dressing Percentage} = \frac{\text{Ar puahsa rihzawng kg}}{\text{Ar nunlai rihzawng kg}} \times 100$$

**Dubbing:** Ar chhuang leh wattle te sakawrbakcheh hmanga paihsak sawina a ni. Hei hi ni khata upa an nihin tihsak an ni thin a, heng a hliam an tawrhpalhte a veng thein chithlah lamah pawh pawimawhna a nei a ni.

**Duckling:** Varak note

**Eaves:** Dithlifarfem

**Egg tooth:** Arnote rawn keu chhuak tur hmui hmawra awm bawk te tak te, hemi hmang hian artui kawr a rawn chuk pawp thin a ni. Artui atanga an rawn keu chhuah hian a thlawn mai thin a ni.

**Feed Conversion Ratio (FCR):** Archaw ei rihzawng chu broiler rihzawng emaw artui rihzawng emaw a sem.

$$\text{Feed Conversion Efficiency (in layers)} = \frac{\text{Archaw eiral zat kg}}{\text{One kg egg weight or dozen eggs laid}}$$

$$\text{Feed Conversion Efficiency (in broilers)} = \frac{\text{Archaw eiral zat kg}}{\text{Ar rihzawng}}$$

**Feed Efficiency Ratio (FER):** Broiler tan chuan kg a teha, buk rihzawng chu kg veka teha, a chaw ei rih zawnga sem. Layer tan chuan artui rihzawng kg a teh a emaw artui dawrzawn khat rihzawng kg a buka an chaw ei rihzawnga sem tur a ni.

$$\text{Feed Efficiency Ratio (in layers)} = \frac{\text{One kg egg weight or dozen eggs laid}}{\text{One kg feed consumed by the bird}}$$

$$\text{Feed Efficiency Ratio (in broilers)} = \frac{\text{One kg body weight gain}}{\text{One kg feed consumed}}$$

**Fecundity:** Chi thatna neia no tam tak nei

**Fertility:** Chi thlah theihna. Artui engemaw zah atanga arnote keu thei tur tam dan kawng kawhmuh tu pawimawh tak a ni.

**Fertility per cent:** Hei hi a percentagea dah a ni a, Artui keu thei zat chu artui zawng zawng awptir zata sem tur a ni, chu chu 100 a puntir leh tur a ni.

**Filler flats:** Lehhakhawng emaw plastic emaw a siam artui dahthat nan emaw lakkhawm nan emaw hmun hrana thawn nan emaw a hman hi a ni. Thleng khatah artui 30 zel a dah theih a ni.

**Flock:** A bikin ar emaw beram emaw rualkhat sawina a ni.

**Franchise:** Ar vulh kawnga hma latu pawl leh ar awpkeutu te leh a chithlah vulhtu te inkara inremna thuthlung siam.

**Fumigation:** Boruak hmanga ar in tih thianghlim dan hmang. Hetah hian formalin leh tuisen na chawhpawlh atanga boruak insiam hmanga tih a ni ber thin a, ar awpkeu na hmun leh ar farm velah natna tihrem nan hman a ni ber thin.

**Gosling:** Vatawk note

**Gander:** Vatawk puitling

**Green Duck:** Varak note thang chak tak, heng hi an sa ei atan kar 9 atanga kar 16 inkar velah an hralh theih mai a ni.

**Grower:** Ar la kar 9 atanga kar 20 a upa emaw an tui tan hma deuh thleng.

**Hatchability:** A percent a dahin heng; artui keu thei tura ngaih atanga arnote keu thei zat emaw ar note keu zat artui awptir zawng zawng atanga chhutin.

$$\text{Hatchability \%} = \frac{\% \text{ of fertile eggs or arnote keu}}{\text{Incubator a artui dah zat}}$$

**Hatcher:** Khawl pakhat emaw artui awpkeuna khawl peng pakhat emaw, artui awplai keu tep tawh ni 2 emaw ni 3 emaw vel la awma artui dahna. Hetah hian artui her chet a ni tawh lo.

**Hatchery:** Artui awpkeuna khawl dahna hmun emaw in.

**Hen:** Ar lam chi zinga ar nu, poultry tih hnuiaia awm zawng zawng vatawk tih loh chu, an upat zawng erawh a ar chi a zirin a dang thei hle a ni. Ar pangngaih chuan arnu puitling tui tawh sawina a ni a, kar 20 aia upa an ni deuh ber thin. Artui atana vulh an ni ber a ni.

**Hover:** Hmanraw pakhat electric bulb te vuah a, arnote awplum nana hman theih a ni (Fig. 1.6)

**Incubate:** Artui keu thei tur atana remchang leh kaihhruaina siam.

**Incubation:** Artui keutirna, hemi atana mamawh lumna, hnawna leh her chet velna te siamsak a, arnote piang tur thanlen nana remchang siamsakna.

**Incubation period:** Artui awpkeu atana dahluh atanga a keu chhuah inkar reizawng sawina a ni a, a ar azirin a dang thei hle a ni.

**Incubator:** Khawl artui awpkeu nana hman, artui awpkeua arnote emaw sai ar note emaw a rawn thang lian thei tur tana mamawh pe thei turasiam ni baw.

**Keet:** Guinea fowl note

**Layer:** Arnu puitling artui atana vulh (kar 21 – kar 72 a upa), tui lai emaw ar, kar 21 – 72 a upa ar tui atana vulh sawina a ni.

**Leeard:** Thli hawizawng dalna.

**Litter:** Ar in chhuat phah, hnawng hiphul thei.



**Live weight:** Ar talh hma a rihzawng.

**Liveability:** Ar damthat theih dan, harh vang leh hmantlaka awm theihna.

$$\text{Liveability} = \frac{\text{Ar hralh theih zat}}{\text{Arnote lei zat}} \times 100$$

**Natural Incubation:** Hetah hian arpuin artui awpkeu tumin a awp thin.

**Nest Box:** Arpui tuilai emaw chithlah tur an tuina atana siam bawm (Fig. 1.13).



Fig. 1.13: Ar tuibawm

**Overhang:** Dithlifarfem.

**Oviparous:** A tui hmanga a note hring thin.

**Pause:** Ni 7 emaw a aia rei emaw tui chawl.

**Pen:** Arvulhna pindan khat.

**Photo-period:** Eng siamchawp hmang emaw ni eng emaw hmanga eng pek hunchhung.

**Pipping:** Arnote lo keuchhuak turin artui kawr a rawn chuk keh sawina.

**Poult:** Sai ar note a nu emaw a pa emaw ni khata upa atanga kar hnih vela upa an nih thleng.

**Poultry:** Ar pangngai sawi nan poultry hi hman fo ni mahse, ar lam chi tamtak heng; ar pangngai, varak, vatawk, guinea fowl, vahmim, sai ar, etc mihringin a sa ei leh a tui atana kan vulhte hi a huam a ni.

**Poultry management:** Kum tluana arvulh atanga hlawkna tam thei ang ber hmuh theih nana tul leh ar vulh dan kawnga pawimawh thiamna leh hriatna kawng hrang hrang te.

**Poultry Science:** Arvulh kawng leh a sa leh tui hralh kawnga hriattur hrang hrang zirbingna.

**Pullet:** Arvulh lai a nu, kumkhat aia naupang. Arnu tui la thlah lo.

**Ration:** Hun engemaw tichhung atana eitur, a zat bithliah sa.

**Rooster:** Broiler thankin kar 9-11 a upa, kg 2.5 atanga kg 3.0 a rit.

**Shank:** ke

**Snood:** Sai ar hmui tona bul atanga taksa peng uai thla (Fig. 1.14).

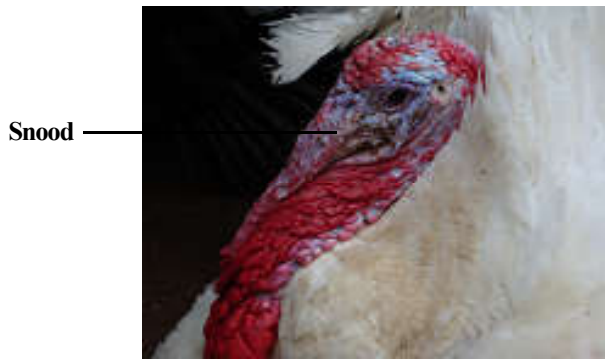


Fig. 1.14: Nawn (Snood)

**Spent hen:** Arpui chithlah atan emaw a tui atana vulh, tui tha tawh lo emaw a nih tur ang ni pha tawh lo.

**Sterile:** Chithlah thei lo, thlah nei lo.

**Tom:** Sai ar pa.

**Trap nest:** Ar tuibawm, tui tura a luh veleh a arpui kalhnnan theihna. Arpui chanchin zirbing nan an hmang thin.

---

### I hmasawna enfiah rawh 2

- Note:** a) Ichhanna te ziah nan a hnuaia hmunawl hi hmang rawh.  
b) Ichhanna chu zirlai tawp lam atang khan endik ang che.

Henghi hrilhfhiah rawh:

1) Broiler

.....  
.....

2) Broody hen

.....  
.....

3) Layer

.....  
.....

4) Comb

.....  
.....

5) Drake

.....  
.....

---

## 1.4 KHAIKHAWMNA

---

He thumal “Poultry” hian ar lam chi zawng zawng heng; ar pangngai, varak, emu, vatawk, guinea fowl, ostrich, parva, vahmim leh sai ar te a huam vek a ni. Khawvelah India hi artui dehchhuah kawngah pathumna China leh USA dawtah a ni a, artui 45

billions kum 2006 khan a tharchuak a. Heng state; Andhra Pradesh, Haryana, Maharashtra leh Tamil Nadu te hi artui thar tam state te chu an ni, heng state atang hian India pumpui dehchhuah zaa 60 laia tam tharchhuah a ni. Khawvelah kum 2006 khan arsa dehchhuahah pangana a ni pha a, USA in a tharchhuak tam ber a, a dawtah China, Brazil leh Mexico te an awm a ni. Broiler tharchhuah tam lamah Andra Pradeshin hma a hruai a, Tamil Nadu, Maharashtra, Punjab, West Bengal leh Karnataka ten an dawt leh a ni. India pumpuia broiler tharchhuah zaa 65 zaa tam mah heng state atang hian tharchhuah a ni. Varak hian ar lam chi dehchhuah kawngah za a 7 a hauh ve a, tuipui kam bakah heng state, lui leh dil tamna; Assam, Jammu and Kashmir, Kerala, Orissa, Tamil Nadu, Tripura leh West Bengal ahte vulh an ni deuh ber a ni. Poultry Industry lama hmasawn na hi artui tam chi leh broiler chi tha thar siam chhuah kawnga hmalakna vang te, vaccine man tlakhniam avang te leh ar vulhtuten an kut zala artui man an pawl National Egg Co-ordination Committee (NECC) kal tlanga an bithliah theih vang te leh poultry schemes hrang hrang sum leh paia tanpuina avang te in alo awm thei a ni.

## 1.5 THUMAL HMAN LEH A HRILHFIAHNA

<b>Anaemia</b>	: Thisen a Oxygen kengtu ber (haemoglobin) tlakchhamna emaw red blood cell tlakchhamna.
<b>Commercial Broiler</b>	: Broiler thang chak hle tura siam leh a chaw ei thatpui chak hle tura siam broiler.
<b>Commercial Layer</b>	: Artui kum khata pum 320 tui thei leh chaw ei thatpui thei tak.
<b>Domesticated</b>	: Ar rual kum tam tak mihring thuhnuai a awm tawhna avanga an nungchang leh khawsak te tihdanglam vek tawh.
<b>Hybrid</b>	: Ar chibing pahnih emaw a aia tam emaw thlah pawlh atanga chhuak, a chithlahtute aia that zawkna nei.
<b>Organic</b>	: Organic egg emaw organic meat tia chhal theih, organic feed a chawm len, chung feed te chu rannung thahna hlo, damdawi, antibiotics emaw thlai thiamna hmanga sawngbawl ni lo atanga hmuh chawsiam hmanga chawm len. Ar chu deep litter system hnuai vulh leh an tlatna tur hmunhma zau tak nei a ni bawk tur a ni.
<b>Per-capita</b>	: Latin tawng atanga lehlin “a lumal zelin” tihna, a awmze tlanglawn chu a mimal zel atan leh a mimal zelina an tih sawina.
<b>Perpendicular</b>	: Penguin ang maia taksa ding ngila kal.
<b>Prolapse</b>	: Mawnglam kua atanga ril emaw chhul emawrawn tawlh chhuak.



**Variety** : Ar chibing hnuaia ar chi hran thliarhran na. Breed hnuaiah hian variety tam tak an hmul rawng a zir te, an chhuang pianhmang avang tein an awm thei a ni. Eg: Black Leghorn, Brown Leghorn leh White Leghorn.

**Poultry Farm chanchin**  
**Tlangpui thlirna**

---

## **1.6 LEHKHABU CHHIARBELH ATANA RAWNTE**

---

Jadhav, N.V. and Siddiqui, M.F. 2007. *Handbook of Poultry Production and Management*, 2<sup>nd</sup> Edn, New delhi, India.

Narahari, D. 1996. *Commercial Broiler Production*. Emkay Publishers, East Krishna Nagar, Delhi, India.

Narahari, D., Asha Rajini, R. and Prabhakaran, R. 2000. *Poultry Economics and Projects*. New Print and Process, Chennai, India.

*Poultry Production Teaching Manual*. 2007. Department of Poultry Science, Madras Veterinary College, Chennai, India.

Sreenivasaiah, P.V. 2006. *Scientific Poultry Production – A Unique Encyclopaedia*, 3<sup>rd</sup> Edn, International Book Distributing Co., Lucknow, India.

---

## **1.7 LEHKHABU RAWNTE**

---

Jadhav, N.V. and Siddiqui, M.F. 2007. *Handbook of Poultry Production and Management*, 2<sup>nd</sup> Edn, New delhi, India.

Lakhotia, R.L. 1991. *Agro's Dictionary of Poultry Science*. Agro Botanical Publisher (India), Bikaner, India.

Narahari, D. 1996. *Commercial Broiler Production*. Emkay Publishers, East Krishna Nagar, Delhi, India.

Narahari, D., Asha Rajini, R. and Prabhakaran, R. 2000. *Poultry Economics and Projects*. New Print and Process, Chennai, India.

*Poultry Production Teaching Manual*. 2007. Department of Poultry Science, Madras Veterinary College, Chennai, India.

---

## **1.8 IHMASAWNNA ENFIAH NANA CHHANNA TE**

---

### **I hmasawna enfiah rawh 1**

- 1) He thumal “Poultry” tih hian ar lam chi zawng zawng mihringina kan vulh heng: ar pangngai, varak, emu, vatawk, guinea fowl, ostrich, parva, vahmim leh sai ar te hi a huam a ni.
- 2) Artui dehchhuahah pathumna leh arsa dehchhuah ah pangana.
- 3) Indian Poultry Industry hlawhtlinnate chu:
  - FCR hmasawna, chi tha vawn, enkawl danhmang hmasawn na.
  - Ranchaw sawngbawlna lama hmasawna thar.
  - Ranchaw chawhpawlh tur tharlam dehchhuah leh lakkhawm.
  - Ar chithlah tha zawk.

- Ar chithlah man leh ar tuitamchi man mumal taka bithliah na.
- Pellet feed uar chhoh a lo ni.
- Archawa pawlh chi viz. enzyme, pro-biotics lo awm tate.
- Pawl intelkhawm he lam hmasawna kawnga ngaihtuahna sengte.
- Archaw hmun tin maiah hmuh tur a lo awm tate.
- Chaw sawngbawl sa lo tam tate.
- Ar chi tha tui ngei tih hriat lo tam tate.
- Rampawna thawmchhuah khawp lo awm tate.
- Natna zawmchhuah kawngah leh a tihdan hmanga hmasawna lo awm tate.

### **I hmasawna enfiah rawh 2**

- 1) Ar la puitling lo, kar 6 vela upa, a nu emaw a pa emaw, sa no leh nem tak nei, vun leh awmruh mam tha tak nei.
- 2) Arpui a tui awpkeu tuma awp.
- 3) Arnu puitling artui atana vulh (kar 21 – kar 72 a upa), tui lai emaw ar kar 21 – 72 a upa artui atana vulh sawina a ni.
- 4) Ar lu chung taksa peng chhuak a lenzawng leh a pianze in ang lo thluah.
- 5) Varak pa puitling.

---

# BUNG 2 ARVULH DAN KAWNG HRANG HRANG

---

## Ruangam

- 2.0 Athiltum
- 2.1 Thukamkeuna
- 2.2 Arvulh chi hrang hrangte
  - 2.2.1 Chicken (Ar pangngai)
  - 2.2.2 Varak
  - 2.2.3 Emu
  - 2.2.4 Geese
  - 2.2.5 Guinea Fowl
  - 2.2.6 Ostrich
  - 2.2.7 Partridge leh Pheasant
  - 2.2.8 Peafowl
  - 2.2.9 Pigeon (Parva)
  - 2.2.10 Quail (Vahmim)
  - 2.2.11 Swan (Vatawk)
  - 2.2.12 Turkey (Sai ar)
- 2.3 Arvulh dan chi hrang hrang te
  - 2.3.1 Thingtlang arvulh
  - 2.3.2 Tunlai thiamna hmanga arvulh
  - 2.3.3 Ar chithlahtu vulh dan hmang
  - 2.3.4 Farm chawhpawlh
- 2.4 Khaikhawmna
- 2.5 Thumal hman leh a hrilhfiahna
- 2.6 Lehkhabu chhiarbelh atana rawnte
- 2.7 Lehkhabu rawnte
- 2.8 Ihmasawmna enfiah nana chhanna te

---

## 2.0 ATHILTUM

---

He zirlai i zirzawh meuh chuan hengte hi i lo ti thei tawh ang:

- India rama poultry farm chi hrang hrang sawifiah theihna;
- Poultry farming system hrang hrang hriathran theihna;
- Thingtlang arvulh leh tunlai thiamna hmanga arvulh sawifiahna; leh
- Ar chithlah vulhtute leh farm inchawhpawlh te mamawh hriatfiah thiamna.

---

## 2.1 THUKAMKEUNA

---

Poultry tih awmzia i hria em? He thumal “Poultry” tih hian ar lam chi mihringin a sa ei atan leh artui atan leh a hmul hman tangkai atan tea kan vulh thinte a kawka. Avian species tam tak heng; ar pangngai, varak, emu, geese, guinea fowl, ostrich, partridge, pea fowl, pheasant, parva, vahmim, vatawk leh sai ar te a huam a ni. Poultry farm siam hi thingtlang leh khawpuiah pawh a rawn lar chho chak hle a. Poultry farm siam

hi India ramah eizawwna beiseiawm tak, neining tak ni lem lo, lekhathiam hna nei lo leh inhlawhfa chawp ram nei lem lo leh mi hausa sa tan hlei hlei hian eizawwna phurawm tak a ni chho zel a ni. Poultry farming hian karkalak a nei zau hle a, a hnuaia tarlante en hian industry hmasawwna kawngah pawh kawngro nasa tak a su ve a ni tih a hriat theih a ni:

- i) Sum lakluhna a siam mai piah lamah chaw tha em em artui leh arsa atangin kan hmu thei a ni.
- ii) Engti kawng zawng emaw talin mi tam takin hnathawh tur an lo hmuh theih phah a ni.
- iii) Sum leh pai dehchhuah kawngah thingtlang mite tan nasa takin tunlai thiamna hmanga arvulh hian kawng a hawnsak dawn a ni. Lekhathiam hna nei lo leh hna nghet nei lo hlei hlei tan a chhenfakawm hle dawn a ni.
- iv) A bul tan nan sum leh pai a ngai tam lo hle a, sum hmuh let a rang hle bawk a ni.
- v) Chawhpawlh farmah ngat phei chuan arvulh hian thlai dang a thar theih loh hun laiin sum dehchhuah kawngah a pui hle a ni.
- vi) Arek hi thlai chi hrang hrang chawm nana leitha petu tha ber mai a lo ni bawk a ni.
- vii) Poultry farming hi office hnathawh chung leh thildang nena kahpaha tih theih a ni hi a thatna em em chu a ni bawk.

---

## 2.2 ARVULH CHI HRANG HRANGTE

---

Ar farm artui leh a sa ei chi vullhnate chu a te deuh leh a lian deuh i hmu thei ang a, chutiang bawkin farm dang heng varak, emu, geese, guinea fowl, ostrich, partridge, pea fowl, pheasant, parva, vahmim, vatawk leh sai ar farm te pawh an awm ve bawk a ni. India rama poultry farm chi hrang hrangte a hnuaiah hian sawifiah a ni:

### 2.2.1 Chicken (Ar pangngai)

A khawsakna hmuna mi mamawh azirin arvulhtu chuan a tui tur chi (layer farm) emaw a sa ei mi (Broiler farm) emaw a vulh a ngai thin. Chumi piah lamah, layer farmah chuan artui hralh chhuah emaw, arla tui tur emaw arnote tharchhuah nan emaw artui keu thei tur dehchhuah emaw ar vulhtu chuan a buaipui thei bawk. Chawtha min petu a nih mai bakah artui hian thatna tam tak a nei a, chungte chu thil charna siam nan, printer tui siam nan, shampoo siam nan, sahbawn siam nan, varnish siam nan leh vaccine siam nan etc. te a tangkai em em a ni. Artui kawr hi mineral a tam avangin ranchaw leh archaw atan te hman a ni thin. Arhmul hi heng bungraw siamnan hian hman a ni thin; cushions, mattress, lukham etc. Layer note leh broiler note hming thenkhat a hnuaiah hian tarlan a ni:

**Broiler:** Anak 2000, Hubbard, Hybro Ross, Kegbro, Shaver Starbro, Vencob etc.

**Layers:** BV-300, BV-380, Bovans White, Deklab, HH 260, Keystone, Shaver Starcross etc.

### 2.2.2 Varak

Varak tui dehchhuah hian chicken dawtah chuan pahnhna a hauh a, a sa ei atan leh a tui atan varak hi vulh a ni deuh ber a ni. Varak vulh hi chhim lam leh hmarchhak lamah hmuh a ni deuh ber a, chung state te chu; Assam, Manipur, Tripura lehn West

Bengal a dawtah chuan heng stateah te hian vulh an ni bawk: Andhra Pradesh, Bihar, Jammu and Kashmir, Karnataka, Kerala, Orissa, Tamil Nadu, leh Uttar Pradesh te an ni. A hnuai a tarlante avang hian varak vulh hi a lar phah hle a ni:

- Dil leh lui luangte a tam a, chicken te hi chu hmun diak leh hnawng tamna hmunah an vulh that ve theih loh a, mahse chutiang hmunte chu varak vulhna atana hmun tha an ni lawi si a ni.



Fig. 2.1: Varak tuicheng lai

- Dil leh tuikhuah mai bakah tui tamna hmunah hian heng varak tana chawtha te hi an awm a; algae, changpat, fungi, rannung te tak te te ho, sangha te, chengkawl, tui a hnim to etc. heng chaw atana hman theihthe avang hian varak chawa senso a tlahniam thei hle a ni.
- Varak te hi an tui tha hle a, tual ar mai pawhin kumkhat ah tui pum 160-180 lai a tui thei a ni, natna lakah an tuarfei hle bawk.
- Varak te hian an tlat paha an ek thlah avangin lei an titha ve bawk thei a ni.
- Artui aiin varak tui hi gm 15-20 velin an rit zawk a ni.
- A enkawl kawngah varak te hi chuti taka ngaihsak an ngai ve lo a ni.
- Khaikhin ralah chuan varak te hian ar ai chuan natna an kai har zawk a ni.
- Varak tam zawkte hian zing dar 9 hmain tui an thlah deuh vek a, chuvangin a tui khawm a ti awlsam a, hna a titem thei bawk a ni.
- Chengkawl leh piring ang chi natna thehdarh kawnga pawimawhte hi an ei thin a vangin natna tihlem kawngah an pawimawh hle a ni.
- Farm chawhpawlh siam nan sangha nena vulh kawp a remchang hle a ni.

### 2.2.3 Emu

Emu hi sum leh pai dehchhuah kawnga tangkai tur atana poultry species a telh hnuhnun pawl tak a ni a. Emu vulh hi a tangkai lamah ostrich te nen zawlkhat an ni deuh ber. Emu hi khawvela sava lianber Australia a tanga lakchhuah a ni a. Australiaah hian science thiamna hmanga vulh uar hle a ni a, an thau, hmul, sa leh vun avangtein vulh an ni deuh ber a ni. A puitling rihzawng hi kg 40-50 lai a ni thei a, an sanzawng hi 1.75 metres vel zet a ni. A tui rihzawng chu kg 0.7 atanga kg 1 lai a ni thei a ni. A sa hi a tui hle a, a hmul hi khawvel hmun hrang hrangah hralh a tla hle a ni. An chithlah theih hunchhung hi kum 40 lai a ni a, thla 18 a upa an nihin chi an thlah thei tan a ni. A tui awpkeu chhung hi ni 52 a ni. Emu puitling hian chaw kg 3 a ei zo thei. Thla 12a

upa an nih a talhin a sa kg 25 vel a awm thei a ni. Emu sahriak hi tihrawl leh ruhchuktuah natna enkawl nan an hmang thin. Hmeichhe hmaihnwih ilo siam nan emu hriak hi an hmang lar chho leh ta zel a ni. Emu sahriak hi a that avang hian taksa in a hiplut tha hle a ni.



Fig. 2.2: Emu vulhna hmun

#### 2.2.4 Geese

Geese te hi ar pangngai dawtah chuan Russia ramah an lar hle a. Geese pate hi gander tiin an vuah a, a nute hi geese an ti a ni. India ramah chuan Brown-backed leh White geese (Fig. 2.3) te hi hmuh an ni.



Fig. 2.3: Geese

Geese zia leh nihna bik te chu hengte hi an ni:

- Eitur chaw leh enkawldan phung hrang hrangte awlsam taka mil thei turin anmahni an in siamrem zung zung thei a, an tuar pawh a chhel hle a ni.
- Crude fibre 40-50% lai mai an chaw ei tur ami chu an paitawih thei a, chuvangin an chaw ei atana senso nasa takin hnim hring an chaw a telhin a tih hniam theih a ni.
- An saah hian chakna a tam hle a ni.
- Goosling (geese note) te chu kar 8 leka upa an nihin kg 5a rit an ni thei a, feed conversion ratio pawh 3.0 kg a ni. Chumi awmzia chu chaw kg 3 an eiral zelin an rihzawng kg 1 in a pungzel thei tihna ani.



### 2.2.5 Guinea Fowl

India hian guinea fowl tamtak a neia, ar pangngai leh varak dawtah chuan an tamber a ni. Sik leh sa boruak inang lo tak tak, hmunro leh hnawngah te pawh an dam tha thei hle a, thingtlang ran vulhtute tana chhenfakawm tak a ni. Heng State-ah te hian tlattira vulh an ni: Madhya Pradesh, Punjab, Uttar Pradesh leh hmun hrang hrangah te. Guinea fowl chi hrang India rama hriat larte chu: Lavender, Pearl leh White te an ni.

Guinea fowl zia leh nihna lar zualte chu:

- Tuarfei, natna laka tuarchhel, enkawl an hautak lo va, tla chi an nih avangin chawm an awlsam mai bakah enkawl em em an ngai lo a ni.
- A sa hi a nem tha a, a rawng chu a sendang leh a duk lam a ni (Fig. 2.4).
- Hunbi neia inthlah chhawng thin an ni a, March atanga September thla inkarah an tui thin.
- Kar 30 vela upa an nihin an tui tan thin a, tui 130-170 a kumkhatnaah an tui thei a ni. An tui rihzawng chu 43-48 g a ni.
- Virus ten natna an thlen thin lakah a him hle a, chuvangin a hri venna pawh pek an ni ngai lo a ni.



Fig. 2.4: Guinea Fowl meat

### 2.2.6 Ostrich

Kum kalta reivak lo a tang khan India ramah pawh Africa ram chhuak ni mahse ostrich vulh hian hma a sawn chak hle a. Hriat theih chinah ostrich hi sava lam chiah a lian ber a la ni. Ranchaw hnim chi khat Lucerne tamna hmun hi ostrich vulh nana remchang deuh mai a ni a, a note atanga hetiang hnim tamna hmuna tlattirte chuan an ngeih em em a ni. Sum leh pai khaihlak lova a awm theih nan emu mai bakah thlai dang, randang leh theirah dangte neih tel bawk a remchang hle a ni. Ostrich te hi ranvulh dang emu, turkey etc. te nena in khata khung khawm erawh natna kaidarh hlauhthawn thu hlaah tih miah loh a him ber a ni. Nikhata upa ostrich note hi 600-700 g a rit an ni thei a, thla 7-8 a upa an nihin kg 150 a rit leh talhrual an ni thei ani. Hetih lai hian 2.5 m a sang an ni thei bawk ani. Kum 70 lai mai an dam thei a, kum khatah note 20 aia tam mah an nei thei a, feet 15 bial vun leh 30 kg a rit sa a nei bawk a ni. A tui pakhat rihzawng hi kg 1.5 a ni. A puitling hian nitin chaw kg 5 a ei zo thei a ni.

### 2.2.7 Partridge leh Pheasant

Hengte hi insualtir atana vulh deuh ber India ramah chuan an ni a. Partridge te hi kum 5-8 aia upa an nih thleng pawhin chithlahtu atana hman theih an ni a, pheasants te erawh chu kum khat chhung chauh hman thin an ni. Partridge te hi an tet lai atangin dahkhawm an nih chuan insual deuh reng mai chi an ni a. Chuvangin a note awplum chhung pawh hian a lo berah 30 aia tlema dah a tha zawk a ni. Partridge te hian nipui leh thal laiin tui 30 an tui thei a ni. Chinese Ring Neck pheasant te hi insualtir atana lar a ni a. Pheasant te hi a zawnin artui 10-12 an tui thei a, an tui te hi ni 23-24 chhungin an keu thei a ni. A chhawrna tur a zirin vulh dan kawng hmang te pawh a danglam thin a ni.

### 2.2.8 Peafowl

Indian blue, Java Green leh Congo te hi peafowl chihrang larzual te chu an ni. A pa pakhatin a nu 5 a tam a vil thei a, kum 2 a upa an nih hnuah an tui tan thin. Dan naranin kumkhatah tui 10-12 chauh an tui thei a ni.

### 2.2.9 Pigeon (Parva)

A mawi atana vulh an ni tlangpui a, a sa ei atan leh infiamna atan te pawh vulh an ni bawh thin. India rama chi hrang lar zualte chu: Homer, Swiss Mondaine leh White King te an ni. A kawp tea khawsa thin an ni a, an damchhung hunin an rinawm tlat thin a ni. Parva chenna in hi 'loft' an ti a ni. A nu hian tui 2-3 ni zawnin an tui thin a, chumi chu kar 4 atanga kar 5 danah an tui thin a ni. Chhun lamah parva pa te hian an tui an awp thin a, hun dang zawngah a nuin a awp ve thung thin a ni. A tui keu nan ni 17 a rei a duh a, a note chu squab tia vuah a ni. An note te chu an nu leh pa ten an chawm dun thin a, an thil ei tawh sa 'crop milk' emaw 'pigeon milk' tia vuah chu luakchhuak lehin an note an chawm thin a ni. Parva te hi geese ang maiin an thang chak em em a ni.

### 2.2.10 Quail (Vahmim)

'Quail' han tih thumal hian ar lam chi te tak te, thil hlauh an neih laia thlawk sawn mai lova tlanche zawk thin a kawh a. Japanese quail hi chihrang then hran hnuai a mi bawh a ni a, India ramah vulh uar deuh ber an ni. A tirah chuan zaitir atan leh lawm hlauh atan maia vulh an ni thin a, tunah chuan a sa leh a tui ei atan vulh an ni ber tawh a ni. Heti taka vahmim vulh a lo lar takna chhan chu hengte hi an ni:

- Sik leh sa danglam takah pawh an tuar a feiin an dam tha duh hle a ni.
- In a bik taka duansak an ngai ve lo a ni.
- An thang chak em em a, kar 6 chhungin an puitling hman a ni. Kar 7 a upa an nih chuan an tui tam vanglai tak an ni. A pa puitling chu 120-150g a rit an ni thei a, a nu chu 150-180 g a rit an ni thei thung a ni.
- Inthlahpung chak thei tak an ni a, kumkhat chhungin thlah chhawng vawi 3 atang a vawi 4 an nei hman a, tui pawh 260 lai kum hmasa ber chhungin an tui thei a ni.
- A nu puitlingin a chaw 20 g a tanga 25 g a rit ni khat chhungin an ei thei a, an tui rihzawng chu 10 – 12 g a rit a ni.
- Ar pangngai leh varak te ngaihtuah chuan an hmun mamawh zauzawng, chaw pekna lenzawng, leh tui pekna lenzawng te a te zawk em em a ni.



- Ar pangngai aiin natna lakah an tuarchhel zawk a ni.
- Senso tlem zawka bul tan theih a ni.

### 2.2.11 Swan (Vatawk)

Hmuhnawm atana vulh an ni deuh ber a. A chi lar ber chu Mute Swan, awrawl nei lo a ni. A kawpte in an khawsa thina, parva ang thovin an damchhung zawngin an rinawm em em a ni. A nute hi kum 30 an nih thlengin chi an thlah thei a, a pate hi kum 60 lai an dam thei a ni. Kum khat chhungin a tui 6-8 chauh lian tak hring var lampang rawng nei an tui thei a ni. A tui hian ni 35 a tanga ni 40 (kar 6) chhung keu nan a mamawh a ni.

### 2.2.12 Turkey (Sai ar)

Ar lamchi vulh zingah turkey hi a sa ei atana vulh a ni ber a. India ah hian turkey vulh hi bul tan chauh ang a la ni a. Agricultural Universities thenkhat leh mimal farm thenkhatah zirbingna atan leh enchhin na atan te vulh a la ni deuh ber a ni. Turkey note leh a puitlingte hi an taksa a len zawk avangin, a taksa peng hrangte mi duhdan azira mawi taka tuamin a zawrh theih a ni. Ar pangngai ai chuan natna lakah an tuar a chhel zawk a, chuvangin, natna an vei mawh hle a ni. Turkey farm siam hian a hnuaia mi te avang hian remchanna a nei ve bawk a ni:

- An thang chak em em a.
- Thingtlang ar vulh angin pawna tlattira vulh theih an ni.
- Artui pangngai aiin turkey tui hi a let 1.3 in a rit zawk a ni.
- Arpangngai aiin natna lakah an tuar a feizawk.
- Ar aiin chaw zawn an thei zawk.
- Arsa dang zawng nena khaikhinin turkey sa hian thau a paitlem zawk em em a ni.

#### I hmasawna enfiah rawh 1

**Note:** a) Ichhanna te ziah nan a hnuaia hmunawl hi hmang rawh.

b) Ichhanna chu zirlai tawp lam atang khan endik ang che.

1) Poultry farm chi hrang hrangte kha engte nge ni?

.....  
.....  
.....  
.....

2) Eng ang poultry farm nge India ramah kan uar deuh ber?

.....  
.....  
.....  
.....

3) Turkey farm siam hlawnka engte nge ni?

.....  
.....  
.....  
.....

4) Varak farm siam remchanna pathum engte nge?

.....  
.....  
.....  
.....

**Tihtur 1**

In khua leh a chhehvel fangkual la, poultry farm chi hrang hrangte chanchin leh an dinhmun lakhawm la. In khua leh a chhehvel atan eng poultry farm nge tha ang tih ngaihtuah la, a chhan sawi bawk rawh.

.....  
.....  
.....  
.....

**2.3 ARVULH DAN CHI HRANG HRANG TE**

Poultry farming system tih awmzia i hre tawh em? Poultry farming system chu ar vulhdan kawng, vulh chhan a zira vulhdan kawng hmang chihrang hrang sawina a ni. Chihrang hrang a tam hle a, thingtlang arvulh atanga thiamna hmanga tam tham taka vulhte, farm te tak te atanga farm lian tak te, artui ei tur atan leh awpkeu atana vulh ang chite an ni.

**2.3.1 Thingtlang arvulh (Backyard Poultry Farming)**

Backyard Poultry Farming hi a bul tanna hautak lo tak emaw senso ngai miah lo te pawh a ni thei ang. Hetiang ar vulhnaah chuan zana an tawm himna tur, chaw zawnga tlattir leh eitur dang tlem pek belh emaw, a note pawh anmahniin an awpkeu mai bawk thin a, an thawh chhuah a tlem hle a (an tui tlemin an rit chak lo hle bawk a ni), tualchhung ah an hralh mai thin a, an hriselna lam pawh ngaihven sak vak an ni lo. Tunhma hriat phak loh atang tawh khan, backyard poultry farming hian pawimawhna thuk tak a nei ve reng a, thingtlang mipuite tan an khawsak kawng hrang hrangah pawimawhna nasa tak a nei chho reng a ni. Hetianga thingtlang arvulh atang hian thingtlang miten chawtha protein an lo hmu ve thei a, hetiang arvulh hian ram puma arvulh zaa 50 aia tam mah a awv ve thin a, tunah erawh chuan chutiang arvulhtute chuan harsatna lian tham tak arvulhtu tam takin hmunkhata sang tam tak an lo vulh chhoh atangin an lo neichho ta a ni. Anihna takah chuan, thingtlang ar vulh danah hian in tin tih deuthaw hian ar 5 atanga 10 vulh ang an ni a. Hetianga arvulh a nih hian ar natna a tam duhin ar chi tha a vang a, tin, ruk ruk leh randang lakah an him lo em em bawk a ni.

Hetianga arvulh hian a vulhtu tam zawk chuan hmanraw tha lo lakkhawm mai theih entirman: brick kehchhia, hlum, tile, wire net, thing etc. ar in atan an hmanng deuh ber thin a, mi tlemte chauhin in pangngai tak sain an vulh ve bawk a ni. Ar in lenzawng hi a dung, a vang leh a sanzawng te chu 4 feet, 3.5 feet leh 2.5 feet te niin sak an ni tlangpui a. Hetianga ar insak hian tihfai a nuama, an ek tihfai a awlsam a, chuvang chuan natna leh ar hrik laka natna awm theite lakah ar an himp hah thin a ni.

Back yard farming ah hian arvulhtu chuan zing takah ar a chhuah a, in bul vel leh in bul huan velah te a tlattir a. Hetianga an tlatchhuah hian ar te chuan choka bawhlhahw paih chharin leh fanghmir, changpat, khau, hnim hring leh eng engemaw thilrah te an chuk thin a. Heng bakah hian a vulhtu chuan buhhum, vaimim, wheat etc. te a peve bawk thin a ni.

A tlangpuiin, arvulhtu chuan arnote a awpkeutir thin a, arpui kha a tui a awpkeutir mai thin a ni. Hetianga ar awplai hi hmeichhiaten an awpna bawmte siamsakin leh tui leh chawpek te nen arnote keu hma chu an buaipui mai thin a ni. Ar awpna bawm hi ar in kil thim lai deuh tihbuai loh turah siamsak an ni thin a, a chhuatphah te dahin an awptir thin a ni. Dan naranin arpui pakhat zel tan artui 8-10 an awptir thin a, ni 21 hnu ah arnote a keu thin a ni. Arnote keu hnu ni 2 ni 3 hnuah arnote an la hrang thin a, a pui an hruaitir thin a ni. Thla 7-8 vela upa an nihin an tui tan thin a. An tui rihzawng hi 35-40g a ni deuh ber a ni. Arpui pakhatin kumkhatah artui 50-60 an tui thei a, arpui chu kar 70-80 a upa an nihin kg 1.5 atanga kg 2 vela rit an ni thin a ni.

India hmarchhak ramah chuan tual ar te hian a bik takin tribal tamna laiah hlut an la hlauh hle a. Artui sen leh ar rawng nei te hian thingtlang mite rilruah hmun a la khuar nghet hle a ni. Hemi avang hian, thingtlang arvulh kawngah hian ngaihtuahna sena, remruatna bik tak buatsaih a hun tawh hle a ni. Indian Council of Agricultural Research (ICAR), New Delhi hmalakna a zarah Coordinated Research Project on Poultry (AICRPP) chuan ram hmun hrang hranga awm ar chi tha lo leh hlawk lo chite chi thaa siam chhoh an nih theih nan ruahmanna a siam chhuak a, heng ar chi tha zawkte hi an rawn siamchhuak thei ta a ni, chungte chu: Giriraja, Gramlakshmi, Grampriya, Krishilayer, Vanaraja etc. te an ni.

### 2.3.2 Tunlai thiamna hmanga arvulh

Tunhma chuan arvulh hi a kahpaha hnathawh atan mai a ni thin a, sum penhlehmuh nan mai leh insualtir atan ar vulh thin a ni bawk a ni. Hnam thenkhat chuan tun thlengin arpa te hi khawvar tur hriat lawk tirtu atan an la hmang reng a ni.

Zawi zawiin, arvulh hian hmasawanna nei chhovin sang tam tak vulh chhoh a rawn ni a. Tlemtea vulh thin khan a sang telin an rawn vulh chho zel a, ar chi tha zawk vulh chhovin, archaw tha pek leh a in tha zawk leh hmanraw tha zawkte hmangin arvulh a ni chho ta zel a ni.

Hetianga tam tham taka arvulh a lo nih chhoh rual hian a enkawl dan pawh hlawk zawka vulh a nih theih nan vulh dan tha zawk hman chhoh a ni ve zel a ni. Heng bakah hian ar chi tha tam zawk, tui in tur hnianghnar zawk, chaw tha zawk, chaw tha siam lama mithiam zawk leh laboratory changtlung takte awm thei se a tha ngei ang. Harsatna lo awm thut thei laka fihlim zawk nan natna hriatchhuah theihna tur hmanraw tha leh veterinary lam hnathawktute awm thei se duhthusam a ni ngei ang. Heng bakah hian, bawhlhlahw paih zung zung theihna leh luanbo theihna remchang a awm bawk tur a ni. Khing remchanna a awm kim thei a nih chuan farm siam turin ruahmanna a siamtheih tawh ang. Poultry farm siam chu senso chi hrang hrang khuh let leh thei a nih theih nan liantham taka siam erawh a ngai thung dawn a ni. Kan ramah chuan ar farm kan siamna chhan lian ber chu artui atan leh a sa ei a tan a ni ber a ni.

**i) Commercial Egg Farming**

Puitham taka artui tharchhuak tur chuan nasa taka beih angaiin leh sumtam tak a mamawh bawka. Ar pangngai leh varak vulh atangin artui tharchhuah hi a tih theih a ni. Ar chi tha tui tam chi te chu; BH-78, BV-300, BV-380, HH-260, ILI-80, ILM-90, ILR-90 leh Starcross-288 te an ni a, varak chi tha te chu; Khaki Campbell leh Indian Runner te hi tui tam chi te an ni. Heng arte hian kum khat chungin artui 280-300 emaw a aia tam emaw enkawl that an niha, chawtha pek an nih bawka chuan an tui thei a ni. Tunlai ar farm lian ho ah chuan ar 10,000 atanga 50,000 ar tuilai te an nei thin a, mimal farm thenkhat pawh in ar 1,00,000 emaw a aia tam emaw te an nei a ni.

**ii) Commercial Broiler Farming**

Artui atana arvulh ang tho khan, broiler vulh pawh hi ar pangngai leh varak vulh atanga in tan ani ve bawka ni. B-77, CA-42, IBB-83, Vencob te hi broiler chi hrang hrang larzual te chu an ni. Chutiang bawkin, Aylesbury leh Pekin te hi duck broiler tha larzual te chu an ni. Heng broiler note te hi an thang chak em em a ni. Hetianga sa eimi te hi chu an sa a nemin a nal a tin, a mamin awmruh nemtak an nei bawka thin a ni.

**iii) Artui leh arsa dehchhuah kawnga hmun pawimawh changtute**

Arsa leh a tui dehchhuah kawnga hmun pawimawh changtute chu hengte hi an ni:

**A) Artui dehchhuah kawngah**

Ar vulh kawngah chuan artui dehchhuah hian kan ramah kawngro a su hle a, nakin zelah pawh a la ni zel dawnin a lang, artui tam chite chu ar in chungah chhuahin emaw bawma chungin emaw vulh an ni ber a. Bawm chungah vulh hi a lar chak hle a. Ar la tui mai thei leh a tuilai enkawl hi bawma vulha tih a ni ber a ni. Chung arte chu a ruala vulh emaw a hranga vulh emaw an ni thei bawka ni. Artui tamthama tharchhuak tur chuan heng thil ar chi thatdan azir te, dah bit dan tawkte, ar thar thlak kual dan azir te, an chawtha ei azir te leh artui hralh that dan azir te hian kawngro an su hle a ni.

- **Ar chi tha:** A enkawl dan kawng dang leh natna ven kawnga hmalak danin thu a sawi hle chung pawhin ar chi tha chuan artui dehchhuah theih danah te, an chaw ei artuia a insiam chhawn that danah te, an dam that dan azir tein an that dan anrawn tilang thin a, a chi thatna inphumna tak ‘stock’ pawimawhna heng hian a pholang hle a ni.
- **Arpui neihzat:** Arpui ngah danah hian a tlem lampang 100-200 ar tuilai kawh leh, chu aia tam 10,000 atanga 50,000 arpui tuilai vulhte ani thei a. Farm lian ah chuan a te ai chuan a tira senso a tam zawk hle a, a chhan chu a in sak nan leh hmanraw dang senso a tam zawk avangin a ni.
- **Arpui dah bit:** Arpui dah bitdan a zir hian kawng hnih a kawka thei a, arpui pakhat zelin a hmun awh zauzawng leh ar rual khatin an hmun awh zauzawng angah te. Heng kawng hnih te hian arpui that danah nasa takin nghawng an nei a ni. Ar rual khat atan arpui dah tam lutuk leh arpui pakhat tana hmun zuah tet lutuk avang te hian artui thar a hniam phahin thihna a thlen tam duh em em a ni. Arpui te hi bawma chung ai chuan chhuata chhuah darh te hian an thawl leh tawtin awmzia a nei zawk em em a ni.
- **Arpui thlak kual:** Artui tam chiah chuan, arpui thlak hun hi ar in sawisak dan azir leh ar upat zawng azir teah a inngat thin a, ar chu arpui tuilai neih tan chiah a lak thar an nih chuan, ar in sawisak hun chu ar tui mai tur neihtan hun kha a ni thei anga, chung chu an tui rem hnuah hralh chhuah emaw talh emaw an ni thin.

Chumi tihzawh ah chuan ar in chu tihthianghlim a ni a, ar thar tui mai thei dahluh leh a ni ta thin a ni.

- **Chawtha:** Archaw hi senso tamna ber a ni a, arten chhiatphah nana an hman loh tawkin archaw a senso hi a theih chin chinah tihhniam tum tur a ni. Chaw hi taksa enkawl nan leh artui siam nan a pawimawh em em a ni.
- **Artui hralh:** Artui tharchhuah kawngah artui man hian nasa takin kawngro a su em em a ni.

**B) Arsa (Broiler) tharchhuah**

Broiler tharchhuah kawngah hian hun rei lo te chhung atana senso liantham mamawh a ni. Hun laklawha rah tharchhuah mai tur a awm loh avang leh a tawpah chauh tharchhuah hmuh tur a awm avangin a senso zawng zawng chu atir atana senso angin a ngaihtheih a. Broiler vulh dan chi khat ‘All-in-All out’ zawm hi a tha bera ngaih a ni a, hei hian natna pawh a titem a ni. A tira senso bakah broiler vulh kawnga nghawng neitute chu; ar chi tha, kum khata vulh tam zawng, chaw ei hman tangkai a nih dan phung, hralh theih huna an upatzawng, in hmunhma hman tangkai te an ni.

- **Ar chi tha:** Broiler note lak chu an thang chakin an dam tha em em tur a ni a. Chawtha leh enkawldan phung te hian broiler chu an hlawk dan tur leh an than chak danah pawimawhna an nei nasa hle a ni.
- **Broiler vulh tam zawng:** Kumkhata broiler vulh tam zawng hi an than that dan azir leh down time azirin a danglam thei a. Down time chu broiler hralh zawh hnu a broilerin tihruah hunchhung hi a ni a, hemi hun chhung hian ar in chu tihthianghlim a ni a, ar thar dang dah leh hun atana inbuatsaihna hun a ni. Hei hian ni 7-15 chhung a aw h thei a ni.
- **Chaw leh feed conversion:** Archaw hi thil pakhat atana senso tamna ber a ni. Broiler tharchhuah kawngah hian an chaw ei an sa atana a in siam chhawn that dan azirin kawngro a su hle a ni. Chaw hi taksa enkawltu atan leh taksa than len nan a pawimawh hle a. Broiler a lo len chhoh zel hian feed conversion efficiency hi a tlahniam ve zel ani.
- **Hralh theih huna an upatzawng:** Hei hi talh an nih theih hun a ni a, a sa man leh a chaw man nen a in laichin hle a ni.
- **In hmunhma hman tangkai:** A hlawk thei ang bera broiler tharchhuak tur chuan All-in-All-out a vulh hi a thain natna ven kawngah pawh a pawimawh hle a ni. Hetianga vulh an nih chuan hun khatah broiler zawng zawng in pakhatah vulh khawm an ni a, chung chu vawi khatah a rualin hralh chhuah leh vek an ni thin a ni.

---

**I hmasawna enfiah rawh 2**

**Note:** a) I chhanna te ziah nan a hnuai a hmunawl hi hmang rawh.

b) I chhanna chu zirlai tawp lam atang khan endik ang che.

1) Backyard poultry farming awmzia enge ni?

.....

.....

.....

.....

2) Commercial poultry farming chi hrang hrangte kha engte nge ni?

.....  
.....  
.....  
.....

3) Artui leh arsa dehchhuah kawnga pawimawhte kha engte nge ni?

.....  
.....  
.....  
.....

**2.3.3 Ar chithlahtu vulh chungchang**

Indiaah hian, broiler leh layer chi tha siam chhuah kawngah ar chithlah vulhtu heng Bangalore, Coimbatore, Hyderabad leh Pune a mite thawhrimna azarah hmasawn na a rawn awm chho va. Hetiang chithlah vulhtute tum ber chu artui keu thei tharchhuah leh arnote chi tha tharchhuah hi a ni ber a ni.

Ar chithlah enkawl kawngah hian artui tamchi vulh dan kawnga tihdan nen a inang hle a. Ni khata upa an nih atanga an tui tan thlenga enkawl dan a inang a ni. A danglamna chhe te chu ar chithlah turte hian chithlahtu an nihna ang ngeiin pianto tha zawk an mamawh a, Chawtha leh insawizawi an mamawh ve a ni. Chithlahtute hi hmun zau zawk pek an ni a, tui leh chawpeknate pawh hmun zau zawk ruahman sak an ni. Amaherawhchu, a chi chhia theh thang kawngahar chithlahah hian tih nasat zawk a ni. Ar chithlah te hi an puitlin hma chu a hun hmaa chi an thlah lohna turin dahhran an ni thin a ni.

Ar chithlah puitling tawh chu dan naranin chhuatah dah an ni thin a. Bawma khung an nih chuan artificial insemination hman a ngai thin a ni. Arpui leh a pa chithlah dahpawlh zat hi inthlahtir dan azir leh ar chi azirin a dang thei a. A pa chithlah ho chu a nu bulah kar 6 vel a nute chu an tuihnu ah dah pawlh an ni chauh thin. Chutih hunah chuan, artui pawh artui pangngai tiat a lo ni tawh ang. Artui chu a fai thain a tha tur a ni a, a tuibawm pawh a fel faiin artui zing taka lakkhawm tur a ni bawk.

Artui keu thei tur leh broiler note tha tharchhuak tur chuan ar chithlah enkawl kawngah fimkhur a pawimawh em em a ni. Broiler leh artui tam chi tharchhuahna atan ar chithlah te hi thil thuhmun atana vulh (artui keuthei tur tharchhuah nan) hman nimahsela heng ar chihnihte hi ar chihran hlak an ni tih hriat ni se a tha ang.

Artui tam chite hi chi hnihin a then theih a, chungte chu; white-egg layers (White leghorns) leh brown-egg layers (Rhode Island Red) te an ni. Chutiang bawkin broiler chi thlahtute hi normal or standard meat type breeder leh mini or dwarf-type breeder tia then hran leh an ni. Broiler tam tak tharchhuak turin mini type nu leh standard male an inthlah pawlhtira, tichuan standard broiler a lo chhuak thin a ni. Tualchhunga hralh kal dan azirin broiler chi hrang tam tak siam chhuah a ni thin a ni.

**Ar chithlah vulh kawnga ruahman na:**

- **Housing:** Ar chithlahte hi chhuatah emaw bawm ah emaw vulh theih an ni a. Chhuata vulh an nih chuan chhuat zauzawng 1860 cm<sup>2</sup> pakhat zel tan a tawk a,

bawma khung an nih chuan a nuin 450 cm<sup>2</sup> leh a pain 700 cm<sup>2</sup> an mamawh tawk a ni. Pakhat zel tan chaw pekna seizawng 15 cm leh tui inna 2.5 cm leh ar tui bawm pakhat arpui pali zel tan a tawk bawk a ni. Arpa tuai leh arla te hi a hranga vulh an tha fo tih hriat bawk tur a ni.

- **Ar rual inkhuang rual:** Ar rualte chu an rihzawng inkhuangrual ni thei se a tha. An chi azira an nihdan tur ang thlap ni thei se a tha ber a ni. Artui awpkeu tur dehchhuah kawngah ar chithlah that dan phawk chhuak turin hei hi a pawimawh hle bawk a ni. An than chhohdan a rualkhai viau chuan an tui tharchhuah pawh a tha zawk hle ang tih a sawi theih a ni. Kar 4 a upa an nih atangin ar chithlah note te chu an rihzawng azirin dahhran thliah thliah tur a ni a, arte chaklo bikte chu enkawl na bik pek tur a ni. An thanlen hun chhung zawngin zaa 80 talin inan tlanna an nei ngei tur a ni. Dan naranin, thlasik laia vulhte chu an rit zawk hret thin a, nipui laia vulhte chu an zang zawk hret bawk thin a ni.
- **Chaw pek ruahmanna:** Chaw hian tlang takin artui dehchhuah kawngah leh inthlah chhawn kawngah nghawng a nei a, chuvangin artui keuthat leh keuthat loh vah chaw hi a pawimawh fal hle a ni. Arte insiam tur pawh artui chhunga chaw tha awmah a inngat nasa hle a ni. Chuvang chuan, ar chithlah chu chaw tha artui chhunga arnote insiam tur mamawh pai tam pek ngei tur a ni. Ar chithlah a nu leh a pa te chu artui tha taka a keu theih nan chaw a hranga buatsaih a ngai thin a ni.
- **Inthlah chhawn kawng ruahmanna:** Ar chithlah zinga a pate chu kar 21 a upa an nih thleng dah hran tur an ni a, chumi hnuah a nute nen dahpawh chauh tur a ni. Artui te chu a tam thei ang ber a keu theih nan a pa chu a lo berah anmahnia inthlah tur an nih chuan zaa 12a tam dah tur a ni. Artificial insemination tih tur a nih chuan zaa 8 a tawk a ni. Inthlah theih hun (22 weeks) an nih tantirh ah arpa 8, arnu 100 zel tan dah tur a ni. Arpa chaklo, kebai leh damlote chu rang taka dah hran vat zel tur a ni. Artificial insemination tih nan chuan arpa za a 5 tal a chi 0.5 ml vawikhata pechhuak thei leh za a 60 motility nei chithlahtu atan hman tur a ni. Ninga chhungin vawikhat a pachi chu 0.03-0.05 ml a tam a nu chhulah a pa chi lakchhuah atanga minute 30 chhungin kahluh thin tur a ni.
- **An hriselna lam ruahmanna:** Artui tam chi vulh kawngah tihdan hmang nen a inzul hle a. Natna tamdan azirin he ruahmanna hi a hun leh a hmun azirin a danglam thin. Hrivenna pek kawngah danglamna awm chu; heng vaccine atan hian killed vaccine hman a ni; Infectious Bronchitis, Infectious Bursal Disease, Mycoplasmosis, Ranikhet Disease etc. Dan naranin, heng vaccine te hi ni 45 hnuah arteah hrivenna tha zawk a awm theih nan pek nawn a ni thin. Fowl Cholera vaccine chu a lenna fo hmunah chuan kar 10 a upa an nihin pek tur a ni a, chu bakah, ar pate chu kar 16 a upa an nihin mycoplasma leh salmonella an vei leh vei loh enfiah tur a ni a, a veite chu dahhran vat tur a ni. Rulhluthlo pek hi thla tin emaw kar 6 danah emaw chhuata vulh an nih chuan tih tur a ni a, thla hnih chhungin vawi khat bawma khung leh chhuatphah siana dah an nih chuan pek bawk tur a ni.
- **Natna venkawng ruahman na:** Bio-security hian ruahmanna hlawmkhat tharchhuah atanga hlawkna hmu tura insenso te a huam a ni. Natna taidarh tur ven kawngah hmalakna ah bio-security hi ngaihtur a ni a. Bio-security chhenfakawm tak nei tur chuan a senso leh insak dan ruangam leh hmanraw mamawh neih dan a zir te leh a enkawltu leh thawktu te inpeknaah te a inngat hle a ni.

Hriselna kawngah ruahmanna, chaw pek kawng, tui in tur ruahmanna, damdawi pek kawng leh hrivenna kawngah ruahmanna te bakah a hnuai tarlan hmangte hian ar chithlah enkawl kawngah hmasawna a hmuh theih bawk ang:

- Ar chithlah vulhna hmun chu tual ar vulhna leh ar chi dang vulhna nen inhnaih chilh takah a awm tur a ni lo.
- Ar chithlah vulhna hmun leh artui tam chi vulhna hmun chu tha taka daidan tur a ni.
- Kawngpui tha takin a pawh tur a ni a, tlawhtu leh lirthei lakah venhim tlat tur a ni.
- A thawktu awm lai a nih loh chuan in zawng zawng te chu kalh vek thin tur a ni.
- Hnathawktu zawng zawngte chu thianghlim taka invawn tur a ni a, inbual fai fo a bika ruahman kawr dang thawmhnaw hak lai chungah hak thuah fo tur a ni.
- Hmanrua leh bungrua reng reng farm dang nen inhman pawlh miah loh tur a ni.
- Artui dahna hmanruate hi natna hrik leh ar hrik dang tihdarhna tha tak an nih avangin plastica siam awlsam taka silfai theih tur artui dah nan hman thin tur a ni.
- Archaw thianghlim chauh pek tur a ni.
- Ar damlo, inhliam leh ar thite senghawi dan tur ruahmanna fel tak neih tur a ni.

Chuvang chuan, arvulh kawnga hmasawna hmuhtheiha awm tur chuan, artui keu thei tur tharchuah kawngah ar chithlah vulh kawnga tihdan tha engkim zawm hi tihmakmawh a ni tih a hriat theih a ni.

### 2.3.4 Farm chawhpawlh

India ramah chuan Agriculture hi hnathawktu tam berna a la ni reng a. Nimahse, thlai thenkhatte hi hunbi neia chin chite a nih thin avangin leh chhiatna a lo thlen fo thin avang tein loneitu tam tak a lian leh a tete chuan hnathawh tur neih loh hun an nei fo thin a. Chuvang chuan, farm chawhpawlh hian thingtlang mite tan hna kumtluanin a siam thei tura ngaih a ni a. Farm chawhpawlh atanga hnathawh tur rawn insiam hi a mala farm siam ai chuan a tha zawk hle a ni. Thingtlang khawsak khaiding tur chuan vawk vulh, varak, ar vulh leh sangha vulh a ruala tih hian remchanna nasa tak a siam a ni. Chu mai bakah, farm malkhai ai chuan farm chawhpawlhah hian ram, tui leh thildang dang tangkai zawka hman a ni tih hmuhchhuah a ni. Farm chawhpawlh chi hrang thenkhat chu a hnuaiah hian sawiho a ni:

#### i) Poultry-cum-fish farming

Hei hi sum leh pai dehchhuah kawngah chhenfakawm tak a ni a, hectare khat zelah sangha 4500-5000 kg a tharchuah theih a ni. Hetiang hi a remchanna chhan em em chu ranchaw ningnawi mai bakah ran ek te kha sangha chaw atana a hman theih vang a ni. A pahnihnaah chuan, sangha dil chungah ar in sak a nih chuan arek kha a nihna ang takin an ek thlak veleh sangha, common carp ang chi ten chaw atan an lo hmang nghal thei a ni. Ar puitling pakhat hian kum khatah ar ek 25 kg atanga 30 Kg vel an echhuak thin a; ar 500-600 vela tam chuan hectare khata zau sanghadil a chawmzo tura ngaih a ni. Ar ek 40-50 kg zel chu tui thatdan azirin hectare khat zela zau sangha dilah a dah theih a ni.

#### ii) Duck-cum-fish farming

Hei hi farm chawhpawlh zinga lar ber a ni. Varak te hi sangha dil atana leitha petu khawl nunna nei an ti hial a ni. Varakte hi dil tuia boruak titamtu an ni. Varakte hian sangha eitu utawk, ulawng, daidep etc. te chaw a ringin sangha tan an tangkai hle a ni. Varak pangngai 300 bawr vel hian sanghadil hectare khata zau zel chawmthei tura ngaih a ni.



iii) Poultry-cum-pig-cum-fish farming

Farm chawhpawlhah chuan hei hi a hlawk ber a ni. Hetiangah hian ar 270 leh vawk 30 vulh an ni a. Chung vawk ek te chu sangha dil hectare khat a zau zel atan a tawk thei a ni.

---

**I hmasawna enfiah rawh 3**

- Note:** a) Ichhanna te ziah nan a hnuaia hmunawl hi hmang rawh.  
b) Ichhanna chu zirlai tawp lam atang khan endik ang che.

1) Ar chithlah engtianga enkawl tur nge ni ang?

.....  
.....  
.....  
.....

2) Farm chawhpawlh hi farm mal aia a that zawknate enge ni?

.....  
.....  
.....  
.....

3) Farm chawhpawlh zingah ..... hi a hlawk ber a ni.

**Tihtur 2**

I chenna chhehvelah eng farm system nge hmuh tur awm en kual la, eng ang farm system nge remchang ber ang tih ngaihtuah la, a chhan sawi bawk rawh.

.....  
.....  
.....  
.....

---

**2.4 KHAIKHAWMNA**

‘Poultry’ han tih hian ar lam chi a sa atan, a tui atan leh an hmul atana kan vulh sawina a ni. Ar pangngai leh Varakte hi artui atan leh an sa ei atan vulh an ni ber a ni. Poultry farm chi hrang hrangte chu: ar pangngai, varak, turkey, geese, vahmim, emu, guinea fowl, swan, pea fowl, parva, pheasants, Ostrich, partridges etc. te an ni. Thingtlang arvulh hi hlawkna nei tlem tak emaw nei mang lo emaw a ni a, zan lama awmna tur in a awm a, chhun lamah an tla chhuak a, chawtha an ei tlem hle a, a puin a awpkeu thin a, an tui tam ngai lova (tuit lem leh an rit lo), tualchhungah an hralh thin a, hriselna lam hawia hmalakna a awm bawk lo a ni. Tunhma chuan arvulh hi hna penhleha hman thin a ni a. Zawi zawiin arvulh hi a lo lian chho zel a, sang tam tak vulh an lo ni ta a ni. Ar chithlah te chu artui tam chi vulh an nih dan ang thovin enkawl an ni a, ni khata upa a nih atanga an tui thlah thlenga vulh dan hmang a inang reng a ni. Danglamna tlem awm theiah chuan, ar chithlahte hian chi thlah tur an nihna ang ngeiin

tha chakna te an mamawh tam zawk a ni. Farm chawhpawlh ang chite hian thingtlang mi te tan hna a siamna kawngah that zawkna an hauh thei a ni.

## 2.5 THUMAL HMAN LEH A HRILHFIAHNA

<b>Breeders</b>	: Artui keu thei tur tui theitu ar.
<b>Broiler</b>	: A sa ei chi atana arvulh.
<b>Clutch</b>	: Hun khat chhunga artui awm zat emaw tum khata artui awp zat.
<b>Cockerel</b>	: Arpa tuai (Arpa puitling).
<b>Commercial</b>	: Hlawk thama thiltih.
<b>Entrepreneur</b>	: Tuemaw sumdawwna lama eizawng emaw hmalakna kawng dang hlawkna um chungin, amaherawhchu a hlawkngai ang tih chiangsa lem lo.
<b>Fertility</b>	: Chithlah nei thei emaw chi nung.
<b>Foraging</b>	: Chaw zawn dan phung.
<b>Hardy</b>	: Tuarchhel.
<b>Indigenous</b>	: Tual kutchhuak.
<b>Manure</b>	: Ar ek leitha.
<b>Omnivorous</b>	: Hnim leh sa chawa ring kawp.
<b>Poultry</b>	: Ar lam chi vulhte heng; chicken, duck, quail, turkey etc.
<b>Predators</b>	: Ransa, ransa dang mana chawa ring thin.
<b>Pullet</b>	: Ar la kumkhat aia naupang.
<b>Scavenging</b>	: Pawnlama chawzawnga tla chhuak.
<b>Stock</b>	: Ar emaw ranvulh emaw hman tangkai atan emaw hlawkna atana vulh.
<b>Venture</b>	: Hmalakna chikhat, chhiatphah theihna a nih ruala hlawkpui theih tak tur si.

## 2.6 LEKHABU CHHIARBELH ATANA RAWNTE

Jull, M.A. 1982. *Poultry Husbandry*, Tata McGraw-Hill Publishing Company Ltd., New Delhi, India

Prasad, J. 2005. *Poultry Production and Management*, Kalyani Publishers, India

Saxena, H.C. and Ketelaars, E.H. 2000. *Poultry Production in Hot Climatic Zones*, Kalyani Publishers, New Delhi-Ludhiana, India.

Singh, R.A. 1985. *Poultry Production*, Kalyani Publishers, New Delhi-Ludhiana, India.

Sreenivasaiah, P.V. 1987. *Scientific Poultry Production*, 1<sup>st</sup> Edition, IBH Prakashana, Bangalore, India.

---

## 2.7 LEHKHABU RAWNTE

---

Bell, D.C. and Weaver (Jr) W.D. 2002. *Commercial Chicken Meat and Egg Production*, Kluwer Academic Publishers.

Das, S.K. 2006. *Poultry Production*, CBS Publishers and Distributors, New Ddelhi, India.

Jull, M.A. 1982. *Poultry Husbandry*, Tata McGraw-Hill Publishing Company Ltd., New Delhi, India

Nesheim, M.C., Austic, R.E. and Card, L.E. 1979. *Poultry Production*, Lea and Febiger, Philadelphia, USA.

Oluyemi, J.A. and Roberts, F.A. 1979. *Poultry Production in Warm Wet Climates*, Macmillan Press Ltd., London, UK.

Prasad, J. 2005. *Poultry Production and Management*, Kalyani Publishers, India

Saxena, H.C. and Ketelaars, E.H. 2000. *Poultry Production in Hot Climatic Zones*, Kalyani Publishers, New Delhi-Ludhiana, India.

Singh, R.A. 1985. *Poultry Production*, Kalyani Publishers, New Delhi-Ludhiana, India.

Sreenivasaiah, P.V. 1987. *Scientific Poultry Production*, 1<sup>st</sup> Edition, IBH Prakashana, Bangalore, India.

Sreenivasaiah, P.V. 2006. *Scientific Poultry Production – A Unique Encyclopaedia*, 3<sup>rd</sup> Edn., International Book Distributing Co, Lucknow, India.

---

## 2.8 I HMASAWNNA ENFIAH NANA CHHANNA TE

---

### I hmasawwnna enfiah rawh 1

- 1) Poultry farm chi hrang hrangte chu; chicken, varak, emu, geese, guinea fowl, ostrich, partridge, pea fowl, pheasants, parva, vahmim, vatawk leh turkey te an ni.
- 2) Poultry farm chi hrang hrang zinga India rama lar berte chu chicken leh varak te an ni.
- 3) Turkey (Sai ar) vulh hian a hnuaia remchanna te hi a nei:
  - An thang chak em em a ni.
  - Thingtlang arvulh angin tlattir theih an ni.
  - Ar pangngai (chicken) tuite aiin turkey tuite hi a let 1.3 velin a rit zawk a ni.
  - Chicken aiin natna lakah an tuar a fei zawk.
  - Mahnia chaw zawn kawngah ar aiin an fel zawk.
  - Ar lam chi dang zawng aiin turkey saah hian thau a tlem zawk.
- 4) Varak vulh thatna te chu:
  - Dil leh tuikhuahte bakah tui tlinna hmunah te hian algae, changpat, fungi, rannung, sangha te, chengkawl, tuia hnim to etc. te an awm thin a, hengte hi varak hian chawah an ring thei a, chuvangin heng hian an chaw senso a ti tlahniam em em a ni.

- Varak te hi an tui tha thei hle a, tual varak mai pawh hian natna laka an tuarchhel mai bakah kumkhatah 160-180 an tui thei a ni.
- Chaw zawnga an tlat velnaah an ek avangin leitha a insiam thin a ni.
- Artui aiin varak tui hi 15-20 gm in a rit zawk ani.
- A enkawlinaah chuti lutuka duat leh ngaihsak an ngai ve lo a ni.

### **I hmasawna enfiah rawh 2**

- 1) Backyard Poultry Farming hi hlawkna tlemte emaw hlawkna awm mang lova tual ar vulh dan a ni a, hemiah hian, zana an tawmna tur siamsak an ni a, chaw zawngin an tla thin a, chaw tlem te pek ve an ni thin a, anmahniin an tui an awpkeu mai thin, an dehchhuah a chhe hle a (an tui tlem a, an rit chak lo bawk a ni), tualchungah a tui leh a sa an hralh mai thin a, an hriselna kawngah pawh hmalak a ni ve ngai lo.
- 2) Commercial poultry farming te chu artui tam chi (layer) artui atana vulh leh broiler a sa ei atana vulhte an ni.
- 3) Artui tharchhuah tam leh tam loh nghawngtu chu; ar chi azir, ar ngah dan azir, ar dah tam dan, ar rual inthlak chhawntir dan azir te, chaw ei leh artui hralh that dan azir te an ni. A tira senso mai baka nghawngtu dangte chu ar chi tha, kum khat chhunga broiler vulh zat, chaw leh feed conversion, hralh an nih theih huna an buk rihzawng leh ar in neih ang ang hman tangkai an nih dan azirte an ni.

### **I hmasawna enfiah rawh 3**

- 1) Ar chithlah enkawl dan hmangah hian artui tam chi enkawl dan nen danglam na em em a awm lo va. Ni khata upa an nih atanga artui an thlah tan thlang chu enkawl dan thumun an ni a. A taka hmuh theih danglamna tlem awm chu: ar chithlahte hian pianken tha leh tha leh zung chak, chithlahtu an nihna ang ngeia an mamawh tur an neih a ngai a ni. Hengte hi chaw tha bik leh insawizawina atanga neih theih tura ngaih a ni.
- 2) Farm hrang hrang chawhpawlh hian thingtlang mite tan hnathawh tur tha zawk leh nghet zawk a siam thei a ni. Farm mal khat te ai chuan farm chawhpawlhah hian hna nghet leh hna tha zawk a beiseiawm zawk em em a ni. Farm chawhpawlh heng ran; vawk, varak, ar, leh sangha vulhna angte hi thingtlang sum leh pai hmuh lama hmasawn nan a pawimawh em em a ni. Chu bakah, farm mal tlat ai chuan farm chawhpawlhah hian hmun leh hma, tui, senso leh dehchhuah te tangkai zawka hman a ni zawk thin a ni.
- 3) Poultry-cum-pig-cum-Fish farming: Farm chawhpawlhah chuan hei hi a hlawkber a ni. Hetiangah hian ar 270 leh vawk 30 vulh an ni a. Chung vawk ek te chu sangha dil hectare khat a zau zel atan a tawk thei a ni.

---

# **BUNG 3 INDIA RAM CHHUNGA POULTRY HMASAWNNA ATANA REM RUATNA TE**

---

## **Ruangam**

- 3.0 Athiltum
- 3.1 Thukamkeuna
- 3.2 India ram Poultry farming lam dinhmun leh hmachhawpte
  - 3.2.1 Poultry sector lam ruangam
  - 3.2.2 Ram peng khat mamawh dan leh hmasawn dan hmang
  - 3.2.3 Arvulh dan ruangam leh hmangchang hriatna
  - 3.2.4 Arvulh atanga dehchhuah hralhna lam leh a man bithliah
- 3.3 Thingtlang mite eizawna lama nghehna
  - 3.3.1 Thingtlang hmasawna atan arvulh
  - 3.3.2 Hmeichhiate chanvo
  - 3.3.3 Eizawna
- 3.4 Arvulh lam hmasawna atana hmalakna leh zirna hmunte
  - 3.4.1 Veterinary Colleges
  - 3.4.2 Arvulh lam thiamna chawisan tuma thathawh pawl
  - 3.4.3 Poultry Development Organisations
  - 3.4.4 Polytechnics leh Training Institutions
- 3.5 Poultry Farming tana Sorkar Scheme-te
  - 3.5.1 Poultry Venture Capital Fund – Central Sector Plan Scheme
  - 3.5.2 Broiler leh Layer Farm siamna atana sum lama Bank tanpuina
  - 3.5.3 Poultry Farming tana Insurance huamchin
  - 3.5.4 Hnam tlem zawkte hamthatna atana Prime Minister New 15 Point Progamme
- 3.6 Poultry Cooperatives
  - 3.6.1 Co-operative Society siam dan leh din dan
  - 3.6.2 Co-opeative-te hlawkna
  - 3.6.3 Poultry Co-operative-te dinhmun
  - 3.6.4 Poultry co-operative-te puibawm thei zirna inte
  - 3.6.5 Poultry Co-operative-te hmachawp dinhmun
- 3.7 Khaikhawmna
- 3.8 Thumal hman leh a hrihfhahna
- 3.9 Lehkhabu chhiarbelh atana rawnte
- 3.10 Lehkhabu rawnte
- 3.11 Ihmasawna enfiah nana chhanna te

---

## **3.0 A THILTUM**

---

He zirlai zirzawh a nih meuh chuan hengte hi i hre thei tawh ang:

- India rama arvulh dinhmun leh hriatfiahna;
- Poultry lam zirna hmun leh arvulh tihmasawn tura tanlakna leh sorkarin poultry hmasawna atana hma a laknate; leh
- Poultry cooperatives sawifiahna.

### 3.1 THUKAMKEUNA

Poultry lama hmasawna tur thil duante hi heng remruatna, thlen tum, sum hman dan tur ruahmanna, thilsiamna khawl lam chanchin zirna, hmanraw neih, mi thiam bik leh pawl hrang hrang tena an thunun mai theih a ni lova, chumi piah lamah, heng zawng zawng a khawma zir thiamna hmanga tangkai taka ar vulthu rilru leh an thiltih zawng zawng thlak danglam thei khawp leh chumi avanga an inenkawlina, sum leh pai hmuhna leh khawtlang thleng pawha hmasawna a awm theihna tura ruahmanna tha a ni. Poultry lama hmasawna tur hian heng a hnuai tarlan Central leh State sorkar hnuai peng hrang hrangte hian anmahni zawn theuhah hma an la nasa hle a ni; Agriculture Department, Animal Husbandry Department, Commerce & Industry Department, Food Processing Department, Human Resource Development Department, Indian Council of Agricultural Research (ICAR), Rural Development Department: Financial Institution lam heng: Insurance Company leh Nationalised Banks, National Bank for Agriculture and Rural Development (NABARD) tih te hian an hmazawn theuhvah theitawp an chhuah theuh a ni.

### 3.2 INDIA RAM POULTRY FARMING LAM DINHMUN LEH HMACHHAWPTE

Arvulh hi India ramah Agriculture lama hmalaknaah thang chak ber niin a than dan pawh kum khatah za a 8 atanga 10 a tling pha a ni. Tunah hian India hi artui thar tam lamah khawvelah pathumna a ni a, broiler tharchhuah lamah pangana a ni bawk a ni. Kumkhat chhunga artui dehchhuah beisei zat khumin 45 billions eggs leh broiler 1.6 billions, broilers kum 2006 chung khan tharchhuah a ni thei a, chu chu kum 1971 a tharchhuah 5 billions eggs leh broiler 4 millions te nen chuan a in thlau hle a ni. Khawvela artui dehchhuah atangin India hian 4% a tam a tharchhuak a ni, arsa pawh khawvela tharchhuah 2% hi India tharchhuah a ni bawk. Poultry Industry chhunga pawisa chevel 300 billion rupees lai a tlin avangin mihring maktaduai nga te hnenah hna a siamsak a, artui leh arsa ei kawngah hmasawna awm rualin eizawna hlawk leh nghelnghet arvulh hian a siam chho mek a ni. A vulh hian India's Gross Domestic Product (GDP) 1% lai a hauh va, ran vulh dangin GDP 10% a hauh bawk a ni. Arvulh uar chhoh a lo niha, tharchhuah a lo pun zel avang hian mi pakhatin kum khatah artui 45 ei ang kan ni a, arsa kg 1.76 kumkhatah mi pakhatin ei ang kan ni bawk a ni. Chutih laiin Nutritional Advisory Committee, Government of India chuan artui 180 leh arsa kg 11 lai mi pakhatin kum khat chhunga ei turin a recommend a ni. He inthlahna nasa tak hi tih tlem theih a nih hunah chuan mi tinin chaw tha kan ei theih bakah 10 million velin eizawna kan neih belh thei dawn a ni. Hriatfiah theih zawkna turin a hnuai Table 3.1 ah hian ar vulhna lama hmasawna tarlan a ni.

**Table 3.1: kum 2006 chhunga India ram arvulh lama hmasawna**

Indicators	Quantity
Artui tharchhuah zat	2.6 million tonnes (45 billion eggs)
Broiler tharchhuah zat	2.0 million tonnes (2.1 billion broilers)
Mihring awm zat	1.1 billion
Per capita egg availability	45 number
Per capita meat availability	1.8 kg
Pawisa virkual vel zat	Rs.300 billion
Ar vulh zat	4574 million
Ar chaw tharchhuah zat	13.2 million tonnes

*Source:* Watt Executive Guide 2008-09

### 3.2.1 Poultry sector lam ruangam

Artui leh arsa dehchhuah kawng inngah nana hmangin poultry sector hi ruangam pathumah thendarh a ni a, chungte chu:

#### i) Chhungkaw tan arvulh hian chaw tha a pe

Thingtlang arvulh kawngah hian chhungkaw zinga mi a bik takin hmeichhiaten an buaipui deuh ber, chhungkaw khatah ar 20 vel zel vulh anga ngaih theih a ni. Arvulh atanga an dehchhuahte chu mahni chhungkaw bil atana eir al a ni ber a, a nih loh vek pawhin midang pek atan te leh thildang nena thlengpui atan te hman a ni ber a ni. Heng thingtlang arulhtute mamawh ni anga langte chu; ar chi tha zawk, dehchhuah tam zawk leh dam tha zawk te, enkawl na tha zawk, zirtirna pek te an ni. Hetiang pawl: cooperatives, self-help groups, societies etc. te kaltlang hian chaw tha hriatna kawnga hmasawna mai bakah mumal zawka an dehchhuahte hman tangkai a niha, an sum lakluh a lo pun theih nan heng pawlte hian a pui thei hle baw ang.

#### ii) Arvulhtu intelkhawm

Hetianga ar vulhtu intelkhawmte hian ar vulh dan phung hrang hrang hmangin ar an vulh a, chaw tha hmuh kawnga a puih mai bakah an dehchhuahte hralh chhuah tham an nei tel thei baw a ni. An ar vulh zatte chu za tel atangin a sangbi tein a ni a. Hetianga ar vulh a nih hian a lo berah a tul tur mamawh loh theih loh ang chi te an awm a, chungte chu ar in, hmanrua, arnote enkawl dan leh hriselna lam hawi inzirtirna te chaw tha pek pawimawhna te ar chi tha neih a pawimawhnate inzirtir a tulin, dehchhuah hralh leh tihral hriat a pawimawh hle baw a ni. Cooperative thenkhat leh self-help group kan tih ang te pawh hian sum dehchhuah kawnga ar vulh tangkai dan te an tilang thei hle baw a ni. Heng pawl hrang hrang; District Rural Development Agencies (DRDAs), Banks, Krishi Vigyan Kendras (KVKs) leh Non-Governmental Organizations (NGOs) te hian ar vulhtute thiamna lamah leh an than zelna turah puih theihna nasa tak an nei baw a ni.

#### iii) Lian leh hlawk thama arvulh (Commercial operations)

Hetah hian mumal taka ar vulh a ni a, ar in chhunga khunga vulh a ni ber thin, chi thlah tur uluk takin thiamna sang hmanga vulh an ni baw ani. Ar chi tha a tam thei ang ber tharchhuah lam chu an enghelh ber a ni. A vulh a hautakin an dehchhuah pawh a tam thei reng a ni. Arpui pakhatin kum khatah artui 300 chuang mah te an tui theiin an Feed Conversion Ratio (FCR) pawh 2.0 aiin a tlem zawk mah a ni. Mimala ar vulh teuh ai chuan a huhova ar vulh hi zawi zawiin a rawn lar chho mek a ni. A chithlah tur vulhtute zingah thuthlunna nena arvulh hi a lar chho mek baw a, a hlawkna sum kha a remchan dan azirin an insem mai a ni. Hetianga ar vulh hian an ngaihtuahna senna ber chu dehchhuah hralhna kawng, hriselna kawng, a sa sawngbawl, ramdanga thawnchhuah kawnga arsa vawn thianghlim kawng te an ni. Hetah hian ar chithlah a sangbi atanga a sangbi thlengin vulh an ni a, artui leh a sa ei atan ar maktaduai tam tak vulh a ni thin a ni. Hemi atana mamawhte chu ar chi tha em em, hriselna tha, awpkeuna hmanrua, ar in tha, lirthei, cold chain, sumdawna lam hriatna leh ramdang thlenga thawn chhuah kawnga hmalakna hrang hrangte an tul em em a ni.

### 3.2.2 Ram peng khat mamawh leh hmasawn dan hmang

Economic survey ten an tarlan dan chuan India hmar lam leh hmarchhak rama cheng mihringte hian rampum ngaihtuahin mihring tam ber nihna an hauh va, chutih rual erawh chuan chhim lam leh khawthlang lama michengte ai chuan khawpuia cheng an tlem leh lawi si a ni. Chhim lam leh khawthlang lama chengte hi khawpuiah an cheng deuh ber a, kum khata mimal sum lakluh pawh an sang lawrlak a ni. Chhim lam state pali: Andhra Pradesh, Karnataka, Kerala leh Tamilnadu te ringawt hian ram pumpui

dehchhuah zaa 45 lai an tharchhuak a, mi pakhatin kum khat chhungin artui 57 ei ang niin arsa pawh 500g zel ei ang an ni bawk a ni. Hmarchhak leh ram laili lamah chuan artui dehchhuah chu rampum dehchhuah atanga zaa 20 vel chauh a ni a, mi pakhat kum khat artui ei zat pawh 18 niin, arsa 130g chauh ei ang an ni bawk a ni.

### 3.2.3 Arvulh dan ruangam leh hmangchang hriatna

Rambung then azirin arvulh dan ruangam leh a senso a inang lo thei hle a, ar vulhtu tam zawk chu tlem tham tea mahnia vulh an la tam ber a. Hmun thenkhatah chuan tam tham taka ar vulha intelkhawmin an dehchhuah pawh a tam tham hle a ni. Ar vulhtu intelkhawmna (Integrated operation) hian ram then hrang hrang amite huapin grandparent, parent flocks leh arno buchip vulh bakah, dehchhuah tihral lam, ar chaw siam, veterinary lam atanga enkawlina leh a hlawma hralh chhuah lamte a huam a ni. Hetianga arvulh lama intelkhawm hi India chhim lam leh khawthlang lamah chuan a lar hle a ni. Chutih laiin hmar lam leh hmarchhak lamah chuan mimalin tlem thama ar vulh leh tlem azawng intelkhawma vulh vete pawh an awm ve bawk a ni.

### 3.2.4 Arvulh atanga dehchhuah hralhna lam leh a man bithliah

India ramah hian ar hi a sa ei atan a nung chung a hralh a ni deuh ber a, a hrana sawngbawl leh dah vawha hralh chu a la tlem hle a ni. Ar nung chung a hmun hla tak taka phurh kual hi a senso a tam duh hle a, a buk a zan phahin an thi duh hle bawk. Hemi avang hian rambung khat danga ar phurh sawn lamah harsatna a nasa hle a ni. Chutianga nih avang chuan arvulh kawnga dehchhuah te hi rambung then khat chhung maiah tih ral a ni thin a, hmun hla zawkah a man pawh man zawka hralh a harsa hle a ni. Broiler pawh hi a nung chung a hralh a ni ber a, tlem azawng chu puah saa zawrhte pawh a awm ve bawk a ni. Hetianga nih chhan chu a chhiat harna tura vawn thatna khawl vawng daitu lama harsatna vang leh mipui lamah pawh a nung chung a lei duh an tam zawk vang te pawh a ni ve bawk a ni.

#### I hmasawna enfi ah rawh 1

- Note:** a) I chhanna te ziah nan a hnuaia hmunawl hi hmang rawh.  
 b) I chhanna chu zirlai tawp lam atang khan endik ang che.

- 1) A hnuaia mite lampum zia k rawh
  - i) DRDA .....
  - ii) GDP .....
  - iii) KVK .....
  - iv) NGO .....
  - v) NABARD .....
- 2) Kualkhung zinga pakhat hmangin a karawl dahkhat rawh:
  - i) Indiain ..... artui a tharchhuak (30, 45, 60 billion)
  - ii) Indiain ..... broiler a tharchhuak (1, 2.1, 5 billion)
  - iii) Kumkhat chhungin mi pakhatin artui ..... a ei (25, 35, 45)
  - iv) Kumkhat chhungin mi pakhatin arsa..... a ei (1.5, 1.8, 2.5kg)
  - v) Arvulh lama sum chekual vel zat chu..... (Rs.100, 200, 300 billion)



---

### 3.3 THINGTLANG MITE EIZAWNNA LAMA NGHEHNA

---

A tlangpuiah chuan, India ramah chuan arvuulh hrim hrim hi tlemtham te tea vulh a ni ber a, a vultute lahin eizawn nan berah an hmang deuh zel bawk a ni. An tihdan hmang chu enga pawh ni se ngaihthah theih an ni lo vang. An mamawh pawh a dang ve zel a, an tana ruahmanna siam pawh an mamawh dan azir zela siamrem a pawimawh hle bawk a ni. Chumi hunah chuan arvuulh hian ran vultute dinhmun hmasawna lamah sang tak a thlen ngei ang.

#### 3.3.1 Thingtlang hmasawna atan arvuulh

A nihna takah chuan, khawsak ngelnghehna tih hian dehchhuah tam lam ringawt ni lovin, hnam tenau zawk ten tlakchham a neih, mipa emaw hmeichhia emaw a nih avanga harsatna bik awm theite, chaw tha tlakchhamna lamte a pumpui ngaihtuaha siamthat tumna hi a ni mah zawk a ni. Arvuulh hi chuti taka vulh nana mamawh a san loh avangin thingtlang rethei zawkte tan a thlanawm fo thin a. Ram leh hmunhma nei lo leh khawsak harsa zawkte zaa 50% aia tam mah te hian arvuulh atangin khawsak an lo hmu ve mek bawk a ni. Sorkar leh cooperative leh self help group an tih angete kal tlang leh puihna azarah hetiang a ar vultute hi intelkhawmin an hmasawna an ngaihtuah ve thei thin a ni. Chuvangin, hriatna lo thang zel leh hmeichhiate hmalakna leh lehkhathiam an lo tam chhohna leh hriselna lama hma an rawn sawn chhoh tak avangin hmasawna kawng hrang hrang a rawn inher chho ve ta zel a ni. Hnam hnufualte zingah pawh arvuulh an tunhma hun atanga an lo hriat mah ni se, a rawn lar chho thar ve ta hle zel a ni.

#### 3.3.2 Hmeichhiate chanvo

Arvuulh hi tunhma atang leh hnam bil khawsak thilah hmeichhiate nen hian inzawmna an nei tha hle a. Ram thang lai India angah te hian thiltih kawng reng rengah hian hmeichhiate an tha an thawh tam zawk emaw tih tur a ni a, mipa tih tura ngaih sumdawn leh insakah te pawh tha an thawh tam ve ta hle a ni. Mahni in bula ar vuulh hi hmeichhiate tan tih awlsam tak a ni a, thingtlangah chuan hmeichhiate tana sum khawl na ber a ni ve thei bawk a ni.

#### 3.3.3 Eizawna

Thlai atanga eizawn hian a vawrtawp a thleng chu a nita der mai a, bawng leh ar vuulh hi eizawna atana thlaktu tha tak thang duang tak a rawn ni chho ta a ni. Mamawh a lo sang zel a, artui 45 billion leh broiler 2.1 billion lai tharchhuah theih a lo nih takah hian mihring 5.0 million zet mai tan eizawna a siamsak thei a ni. Ar vuulhnaa tha 80% aia tlem lo hi a enkawltute thawh a ni a, a dang 20% chu a chaw siamchhuah nan te, damdawi lam leh hmanrua etc. atan hman a ni. Mi pakhatin kum khata artui a ei zat pakhat leka tipung tur leh arsa 50g leka tipung turin mihring 25,000 mamawh belh tura chhut a ni.

---

#### I hmasawna enfiah rawh 2

**Note:** a) I chhanna te ziah nan a hnuaia hmunawl hi hmang rawh.

b) I chhanna chu zirlai tawp lam atang khan endik ang che.

1) Kualkhung chhunga pakhat thlang chhuakin a karawl dahkhat rawh:

i) Arvuulh kawngah hian mihring ..... zet chhawr an ni (2, 4, 5 million)

- ii) Ar vulh hian kut hnathawktu te hna ..... % a siam a ni (60, 70, 80 %)
- iii) Ar vulha eizawn hi ram nei lo zinga .....% ten an thlang zawk (30, 40, 50%)
- iv) Tribalte hian ..... vulh nuam an ti hle (Lawi, Sai, Ar)
- v) Chhungkuaa ar vulltute zingah ..... te hian an buaipui deuh ber thin (naupang, inhlawhfa, hmeichhia)

### 3.4 ARVULH LAM HMASAWNNA ATANA HMALAKNA LEH ZIRNA HMUNTE

India ramah hian arvulh lam kaihnavih zirna hmun hi a hnuai tarlan ang hian then hran an ni:

#### 3.4.1 Veterinary Colleges

State Agricultural Universities (SAUs) emaw State Veterinary Universities (SVUs) hnuai Veterinary collegete hian undergraduate atanga doctorate degree thlang lak theihna ar vulh lamah zirna an pe thei a. Kan ramah hian Veterinary college 37 lai a awm a. Heng collegea poultry science department te hian loneitute hnenah pawh zirtirna an pe ve bawk thin a ni. Veterinary college mahni hnaivaia mite hnenah zawhfiah theih an niin hriat duhte a zawh theihin, an tanpuina pawh beisei theih bawk a ni.

#### 3.4.2 Arvulh lam thiamna chawisan tuma thathawh pawl

Indian Council of Agricultural Research (ICAR) hnuai awm Central Avian Research Institute (CARI) hian undergraduate, master degree leh doctorate degree lak theihna poultry scienceah a nei a. Chubakah Short-Term Specialised Training (STST) programmes graduate tan leh Short-Term Training on Poultry Farming (STTPF) arvulha tui mite tan a buatsaih thin bawk a ni. ICAR hnuai ah bawk, Project Directorate on Poultry (PDP), Hyderabad ami hian Poultry Science lama zirbingna leh zirtirna a pe thei bawk a ni.

Table 3.2: Poultry Academic and Research Organisations

State	Institute/Organizations
Uttar Pradesh	CARI, Izatnagar, Bareilly
Andhra Pradesh	PDP, Rajendranagar, Hyderabad

#### 3.4.3 Poultry Development Organisations

Five Year Plan 10na chhung hian tuna awm mek Central Poultry Development Organisations (CPDO) hmun hrang hranga awm 13te chu hmun 4 centers (Table 3.3) a khaikhawma, arvulh lama hmasawna ko khata nghat turin thutlukna siam a ni a. Tuna an thiltum bulpui ber chu thingtlang lama arvulh nasa zawka hmalakna a ni ber a ni. Tunah chuan ram hmunhma thliar felin varak, turkey, Japanese quail leh Guinea fowl te vulh kawngah hmathar a la nasa hle a ni.

Table 3.3: Poultry Development Organisations

Eastern Region	CPDO, Bhubaneswar (Orissa)
Northern Region	CPDO, Chandigarh
Southern Region	CPDO, Bangalore (Karnataka)
Western Region	CPDO, Mumbai (Maharashtra)

### 3.4.4 Polytechnics leh Training Institutions

Polytechnic and training institutionste hian diploma programmes leh training tawi leh sei deuh zawkte a buatsaih thin a. A taka khawiha hriatna nei tura zir an uar ber a ni. Ar vullhna hmun ngeiah a zir hunchhung 75% chu an khawsa thin a, a bak 20% chu classroomah a thuin an zirthin a ni. Heng zirna hmun bakah hian pawl dang thenkhat federations emaw KVKs leh NGOs te pawh hian he lamah hian tha an thawh ve bawka ni. Hetiang zirna hmunte hi awmna bul kiang velah an awm chuanrawn theih reng an ni.

---

#### I hmasawna enfiah rawh 3

**Note:** a) Ichhanna te ziah nan a hnuaia hmunawl hi hmang rawh.

b) Ichhanna chu zir lai tawp lam atang khan endik ang che.

1) A hnuaia mite lampum ziak rawh:

- i) CARI .....
- ii) CPDO .....
- iii) ICAR .....
- iv) PDP .....
- v) STST .....

---

### 3.5 POULTRY FARMING TANA SORKAR SCHEME-TE

A hnuaia tarlan programme emaw scheme-te hi arvulh kawnga hmasawna a tana ruat an ni vek a. Nimahsela, programme thenkhat; Integrated Rural Development Programme (IRDP), Pradhan Mantri Gramin Sadak Yojana (PMGSY), Development of Women and Children Area (DWCRA) etc. kaltlang hian state leh central sorkar te hian poultry farming tanpuina an pe nasa hle a ni. Chutiang programme hrechiang tur chuan veterinarian, rural development officer emaw bank lam hotute rawn theih an ni ang.

#### 3.5.1 Poultry Venture Capital Fund – Central Sector Plan Scheme

Hemi ina a tum ber chu, hnathawh bultanna atana sum hmanga loneitu, mimal emaw pawl intelkhawmte emaw a hnuaia tarlan atana tanpuina pek te a ni:

- State la hnufual zawkte tana arvulh lama hma an sawn theih nana tanpuina pek leh state hmasawna tawhte tana ramdanga tharchhuah thawnchhuah dan kawng dapsak.
- Senso hautak lo zawka ar chithlah tur vullhna hmun pui siam leh chung ang ar chi dang tana siam bawka.
- Archaw siamna hmunpui leh laboratory siam nan.
- Ramdanga thawnchhuah tur buatsaihna atan, artui chhia leh tha thliarfel, tuammawi leh vawnthat na atan.
- Arvulh atanga tharchhuah hmanga sumdawna kawnga tangkai (a bika siam lirthei, vawnthatna khawl etc.)

**i) He scheme hnuaia thitur hrang hrang awm thei te**

- Broiler/Artui hralh atana phurh kualna tur lirthei – Rs.0.01lakh
- Ar thang lai vulhna hmunpui atan (12,500 birds per batch, kumkhatah 4 batches) – Rs. 20.00 lakhs.
- Artui thliar felna, tuammawi leh vawnthatna, thawnchhuah atana sawngbawlina – Rs. 80.00 lakhs.
- Ar chithlah senso tlem chi vulhna atana farm din leh varak/turkey/guinea fowl/ Japanese quail/emu/ostrich etc. tana farm siamna – Rs. 30.00 lakhs.
- Ar chaw dahthatna hmun, chaw siamna hmun, chaw enfiahna hmun siam nan – Rs. 16.00 lakhs
- Ar vulh atanga tharchhuah hralhna atana tangkai tur (a bika siam lirthei, vawnthat na room vawt leh ar hralh tur dah lailawkna in) - Rs. 25.00 lakhs
- Ar puahna hmun siam nan (ni khat ah ar 300 puah theihna) – Rs. 5.00 lakhs

He scheme hi India ram khawi kipah pawh hman theih tur a ni. Mahse, heng state atan te hian ruhman bik deuh a ni; Andra Pradesh, Karnataka, Madhya Pradesh, Maharashtra, North-eastern states, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh leh Uttarakhand. North-Eastern state tan bik hian Rs.7.2 crores atangin Rs.2.0 crores ruat a ni a. He scheme hlawhtlinna atan hian Canara Bank, Indian Bank, Punjab National Bank (PNB) leh Sate Bank of India (SBI) te hian hmahruaitu nih an inhuam thu an sawi a ni. Bank dang thenkhat, cooperative banksleh regional rural bank te pawh an awmna hmunin a mamawh ang zela hmalak kawngah tha thawh ve tura beisei an ni.

**ii) Danin a pawm theih chin**

He scheme chhawr thei tur te chu lo neih lama eizawng, mimal emaw intelkhawm emaw, Pheriwalas khawpuia awm rethei zawkte tana thathawh thinte duhsak bik an ni ang.

**iii) Project buatsaihna**

A scheme milin bank chuan thlan bikte hnenah sum a puktir ang a. A puktur tur chuan bank hoin an pawm theih project a buatsaih ang a, chu chu bank-ah an lo ngaihtuah atan a thehlut ang. An sum puk chu NABARD-ten sum veivir atan an kawl ang a, anni hnen atangin a puktuten 50% project senso a siam atangin a pung (interest free loan) lak a ni lo vang. A pumpui atanga 10% chu a puktuin a thawh ve anga, bank chuan a la bang zawng 40% atangin an dan zulzuiin a pung an la ang. Hei hian a puktur in a pung a pek tur atanga a phurrit tur a chhawk dawn a ni.

**iv) Loan rulhna lam**

Loan rulh chhung hi rulh chak danah a inngah rualin kum 7 aia rei a ni ngai lo va, hemi hun chhung hian in ngaihnhathiamna hun kum 2 a huam tel a ni. Loan rulh that loh chungchangah a puktirtu bankten mawh an phur a, a chhan chu a puktur te chu bank lamin an endik hnua an thlan chhuahte an nih vang a ni.

**3.5.2 Broiler leh Layer Farm Siamna atana sum lama Bank tanpuina**

Broiler leh layer farm dinna atana sum loan hmanga tanpuina hi nationalised bank hrang hrangin NABARD kaltlangin an pe thei a, a hnuaia tarlan atan te hian bank te hian tanpuina an pethin a ni.

**i) Suma tanpuina atana tanchhan**

Hengte tan hian suma tanpuinain a huam ang:

- Heng in sakna atan; broiler in, brooder, ar thang lai leh ar tui lai tan.
- Ar chaw dahna in sak nan leh chenna in sak nan etc.
- Hmanrua heng; brooders, debeakers, chawpekna, filler-flats, ar tuibawm, tui pekna etc. lei nan.
- Heng lei nan; arnote, ar chaw, damdawi leh a enkawltu hlawh atan (broiler tan a tir kar 7 chhung leh layer tan a tir thla 5 atanga thla 6 chhung).
- Ram leina atan loan hi ruahman a ni lo va, mahse, ram chu broiler farm siamna atana lei a nih chuan, a leina man chu a project hlutna 10% chin chu a tira pawisa neih sa anga ngaihsak a ni ang.
- Hengte hi a huam bawk ang; ram leilung siamremna atan, a hungna, tui leh electricity atan, thawktu in sak nan, archaw dahthatna in sak nan, lirthei lei nan, broiler sawngbawlna atan, a wawta arsa dahthatna atan te an ni.

**ii) Bank loan atana scheme ruahmanna**

Tanpuina dawngtu tur chuan State Animal Husbandry/Verinary Department a mithiam, Poultry corporation emaw Private Commercial Broiler Hatcheries emawa mithiam te rawnin scheme a siam thei a. Schemeah chuan hengte hi tarlan tur a ni; a awmna tur ram chanchin, tui leh electricity remchan dan, a tharchhuah hralhna tur lam, zirtina atana remchanna leh a dil chhan atana thiamna bik neih dan te leh State sorkar, poultry corporation leh tualchhunga hatchery-te atanga tanpuina awm thei ang chi tarlante an ni. Tin, hengte hi tarlan tur an ni bawk a ni; farm lenzawng tur atana ruahmanna, project pumpui senso tur, tanpuina dawngtu turina a pawisa a ruahman zat, bank loan mamawh tur zat, kum khat atana senso tur zat, loan leh a pung rulh chhunga lakluh leh hlawkna beisei tur zat te an ni.

**iii) Bank lam miten scheme an endik dan**

Bank a thawk officer ten a dilna form fill up chungchangah leh scheme siam chungchangah an pui thei ang. Bank hnai berah scheme siamsa chu an thehlut ang. Banka thehluh hnuah scheme chu a pawmawm em tih leh hlawkna hmu thei tur a ni em tih te enfiah a ni leh ang. Lehkha pawimawh dang; a dilna form, dahkham lam leh a tira pawisa pekluh ngai zat te endik an ni bawk ang.

**iv) Bank loan remtihna leh a pekchhuahna**

A that dan leh a hlawk dan tur engkim fiah a nih hnuah chuan, bank chuan scheme chu a pe ta thin a ni. Loan chu wawi 2 atanga wawi 3 vela pek chhuah a ni thin a; mamawh dan tur a bika tuk heng ar in sak nan, hmanrua leh khawl lei nan, arte leina, ar chaw leina, damdawi leina, electricity atana senso leh tui leh hnathawktu hlawh tur ang te a ni. Pawisa hmandan zawng zawng endik a ni a, bank chuan a vil reng a ni.

**v) Margin Money**

NABARD chuan ran vulhtute hi chi hrang pathumah a sawifiah a, subsidy a remchang lo a nih chuan tanpuina dawngtu turte atangin a tlem thei ang bera chhutsakin a hnuuia tarlan (Table 3.4) ang hian pawisa a lakhawm thin.

Table 3.4: An dinhmun azira tanpuina dawngtu turten pawisa an pek dan tur

Sl. No.	Category of Farmer	Farmer Level of Pre-Development Return to Resources	Beneficiary's Contribution
1	Small farmers	Up to Rs. 11,000	5%
2	Medium farmers	Rs.11,001 to Rs.19,250	10%
3	Large farmers	Above Rs.19,250	15%

#### iv) Interest Rate

Reserve Bank of India (RBI) in kaihhruaina a neih zulzui chuan, pawl hrang hrang hnuiaia loan laten an loan lak pung an pek tur chu a hnuiaia tarlan ang hi a ni:

Table 3.5: Rates of loan-interest for different types of banks

Sl. No.	Loan Amount	Commercial Bank (CB) and Regional Rural Bank (RRB)	State Cooperative Bank (SCB) /State Land Development Bank (SLDB)
1	Up to and inclusive of Rs. 25,000	12.0%	As determined by SCB/SLDB subject to Min. of 12% (for all loan slabs)
2	Over Rs. 25,000 and up to Rs. 2 lakhs	13.5%	-do-
3	Over Rs. 2 lakhs	As determined by CB/RRB	-do-

#### vii) Loan rulh leh lam

Loan rulh leh lam hi an thawhchhuah atanga hlawkna an hmuh atangin chhut a ni thin. Dan naranin, broiler farm siam nan a loan rulh chung hi kum 5-6 a ni thin. Layer farm tan chuan kum 7-8 a ni thin a, thla tin emaw thla li dana rulh tura ruahman a ni thin, a kum hmasa ber chu ngaihnhathiam a ni thin.

### 3.5.3 Poultry Farming tana Insurance huamchin

Broiler leh layer farmte tan hian tawhsual avang leh natna leng thei laka insurance tih hi a finthlak hle a ni. Heng India ram Insurance company lian pali: National Insurance Company, New India Assurance Company, Oriental Insurance leh United India Insurance te hian chutiang Insurance chu an ti thei a ni. Poultry insurance scheme kimchang te chu hengte hi an ni:

#### i) Scope of the cover (A huam theih chin)

A hnuiaia tarlan vanduaia avanga thihna a thlenin poultry insurance pek theih a ni; chetsualna, intihbuai avangin, thlipui, limging, kangmei, tuilian, tek tla, intual vuakna, nawrhna leh misual thiltih te leh a hunchhunga ar natna a lo awmin.

#### ii) Applicability

He insurance scheme hian India rama ar chi hrang engpawh tual ar a ni emaw ni lo emaw a huam vek a ni.

#### iii) Ar insurance tih theih zat

- Ar chi engpawh bank finance hnuiaia – 500
- General type hnuai ah: Broiler-100 per batch, Layers-500 per batch, Hatchery-2000 per hatch

**iv) Age group and Premium rates**

Type of Bird	Age Group	Premium Rates
Broilers	Day One to 8 weeks	1.5% of peak value
Layers	Day One to 20 weeks	3.2 %
	21 to 72 weeks	3.5 %
Hatchery or breeder farm	Day One to 72 weeks	5%

**v) Insured sum**

Ar hlutna chu an upat dan azirin chhut a ni thin, a tehkhawng siamsa ruahman a ni thin.

**vi) Veterinary examination**

Insurance hi pawm a nih theih nan certificate, tling ngei leh registered veterinarian te atangin neih ngei tur a ni.

**vii) Claim procedure**

- Claim-na tur form verinarian ten dika an chhal.
- Ni tina ar thi chhinchhiahna.
- Ar leina lehkhah
- A dik ngei tih tifiaktu thildang; medical bills, thlalak etc.

**3.5.4 Hnam tlem zawkte hamthatna atana Prime Minister New 15 Point Programme**

Tunhnai mai khan Government of India (GOI) chuan he ruahmanna hi a siam a, he programme hnuaiyah hian India rama hnam hnufual zawkten bank hnuaiyah hamthatna hrang hrang hmuh theihthe atangin an chanvo dik tak an hmuh theihna turin kawng a hawnsak a ni. He progammein a tum pawimawh tak pakhat chu hnam hnuaihnnung zawk thahnem tawk takten government sponsored scheme reng rengah chanvo an neih theihna ngei turin a bei a ni. Poultry farm siam nan hian public sector dang bank te pawhin loan an pe ve bawk thin a ni.

**I hmasawna enfiah rawh 4**

**Note:** a) I chhanna te ziah nan a hnuaiyah hmunawl hi hmang rawh.

b) I chhanna chu zirlai tawp lam atang khan endik ang che.

1) A lampum ziaak rawh:

- i) IRDP .....
- ii) PMGSY .....
- iii) RRB .....
- iv) SCB .....
- v) SLDB .....

**3.6 POULTRY COOPERATIVES**

Coopeative hi hetiang hian hrilhfhah a ni thin; mi tute emaw intelkhawm, sum dehchhuah kawngah leh an khawtlang nun leh nunphung mamawh leh an tuina te inpuiza thei

tura inrelbawl na nei leh anmahni ngeia an siam leh enkawl intelkhawmna hi a ni. Hetiang hian a sawifiah theih baw ang, cooperative chu sumdawmna mi hrang hrang ten intluk tlang taka an siam leh enkawl, a hamthat na leh a hnathawh an intawmna. Poultry cooperative thiltum hrang hrang te chu:

- Poultry industry tana mi tangkai tur chherchhuah.
- Artui leh arsa tharchhuahna kawnga hmalak.
- Sumdawmna hlawkzawkna atana remchanna siamsak.
- Arvulh kawngah hmasawmna a awm theih nana hmalak.

### 3.6.1 Co-operative Society siam dan leh din dan

Poultry co-operative siam nan hian dairy co-operative siam dan hmang entawn theih a ni a. Ar vulhtu tawh phawt chu he society-ah hian member an ni thei a. Society chu managing committee thlanchhuahten an enkawl a. Society-ten an thlanchhuahten chairman chuan secretary a ruat thin a, secretary chu manager a ni nghal baw a ni. Arvulh lam chanchin pawh a hre ve hle tura ngaih a ni. Society member-te chuan arte, archaw leina hmun turte an ngaihtuah bakah ar hralhna turte an ngaihtuah thin, union lam chuan loan leh a rulhna lam, insurance, hriat lawk loh avanga chhiatna thleng thei awm theite a ngaihtuah thung a ni.

District pakhat chhungah society 150-200 vel intelkhawmin union pakhat a siam theih a ni. Union chuan hengte hi a nei tura ngaih a ni; hatchery, archaw siamna hmun, artui vawnthatna hmun, artui pack-na te neiin thawktute training pekna hmunte an nei tur a ni. Union chu chairman, vice-chairman leh board members thlanchhuahten an enkawl a ni. Chutiang zelin poultry producers' union tam tak intelkhawm chuan State Poultry Producers' Co-operative Federation an siam vele a, chu chuan national organisation thenkhatte nen inzawmna an nei chhawng leh zel thei a ni. Dairy co-operative te hi chu bawng vulhtuten an bawngnute an hralh theih nana an siam a ni tlangpui a, poultry co-operative-te hi chu sorkar lam hmalakna azara rawn intan a ni zawk fo a ni. Poultry co-operative-te chu hnam tenau leh chak lo zawkte chawikanna atana bultan an ni tlangpui thin. Poultry co-operative a tel mipui te tum ber chu pawl kaltlanga loan hmuh leh a man chanvea thil hmuh beiseina vang a ni deuh ber a ni. Arvulh atanga tharchhuah hralhna lam hian ngai an awh rei lo thei hle a, an danglam deuh reng thin a ni.

Poultry co-operative atanga beiseina awm theite chu hengte hi an ni:

- Tharchhuahte man man zawka siam a nih theih nan.
- Hnam tenau zawkte khawsak phung chawisang theitu anga ngaih a ni.
- Thiamna sang zel chhawr tangkaiu bulpui anga ngaih a ni.
- Archaw tha zawk leh a man tlawm zawk pechhuak theitu a ni.

### 3.6.2 Co-operative-te hlawkna

- Ar vulhtute zingah inpumkhatna a siam.
- Hnam anga thil chin tha lo, inkhawih thian lohna te a titem.
- Ran leh arvulh kawnga hmanlai mite ngaihdan atthlak tak takte a titem.
- Thiamna sangzaw hman a nih avangin tharchhuah a lo pun phah.



- Tharchhuah hralhna atangin hlawkna an hmu.
- Thingtlang thalai leh hmeihhiaten hnathawh tur an hmuh phah.
- Co-operative-te sum hmuhchhuah atanga tam tak chu school leh hospital tih hmasawn nan hman tangkai a ni.
- Nunphung pumpuiaah changkanna heng; bungraw tha neihna, naupang lehkhha zirna tha zawk etc. ang chiahte hian a thlentir.

### 3.6.3 Poultry Co-operative-te dinhmun

Tun dinhmunah chuan India ramah hian poultry co-operative society-te hi 2,595 vel an awm mek a. Poultry industry lama hmasawna nei tawh state pakuate zingah co-operative-te hian state pahnih; Gujarat leh Maharashtra te chauh hian an hnathawh hmuh tur tha a awm a ni. Kum 1972 leh 1992 inkar chhung khan society-te hi a leta tamin an rawn pung a, mahse society hmasawn lo leh reh hlen leh ta chu zaa 80 lai a tling a ni. Poultry lam hmasawna kawnga kum 30 lai ke kan pen tawh hnu pawh hian poultry co-operative-te hian awmhmun an la rem fel hleitheh lo a ni.

#### i) Gujarat Poultry Co-operatives

Gujarat stateah hian tlawmngai pawl thenkhatten poultry industry hmasawn kawngah hnarkaitu nihna pawimawh tak an chelch chho va, ar 100 atanga 150 vel vulh khawmin khawtual mite hnenah ni khatah vawithum ar in chu tlawh kualpuiin ar in tihfai, chaw pek leh tui pekte an tihpui thin a, Society lamin archaw tum sakin artui hralh kawngah te an tanpui bawh thin a ni. Hnam hnufual zawkte hnenah ar insak senso a chanve tumsakin an pui bawh thin a ni. Gujarat hi hetiang society co-operative chak tak mai awmna hmun awm chhun a la ni reng a ni.

#### ii) Maharashtra Poultry Co-operatives

Maharashtra co-operative society-te hian hmun laili takah ar in an sa a, chutah chuan arte kar 20a upa an nih thlengin an vulhsak a, an tui hun a lo thlenin an memberte hnenah anmahni in bul theuh a vulh turin ar 100 atanga 200 te an pe chhuak a, a in sakna senso man chanve te an tumsak bawh thin a ni. Archaw an ngaigtuah sakin an tharchhuah te hralhna an ngaihtuhsak bawh thin a ni. Kum tluanin society chuan artui man inang an bithliahsak thin a, dawra artui hralhna a lo san hian ar vulhtute chuan society kaltlanga artui hralh chu an hreh deuh thin a ni. He stateah hian poultry co-operative-te rawn thang chak hle mahse hmasawna tak tak nei tur chuan ke pen tur an la nei ngah hle a ni.

#### iii) State danga Poultry co-operative-te dinhmun

Heng state; Andhra Pradesh, Kerala, Karnataka, Madhya Pradesh, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal etc.ah te hian poultry co-operative-te hian hnuhma sawi tur an la nei lo hle a ni. Heng stateah te hian hnam hnufual zawkte chawikan nana ar vulh lam uar thuhlaah thu mum a awm lo hle a, darsarh tak leh hmun hla tak takah te vulhtir niin, a vulhtute pawh archaw man man zawka lei tirah te, ar hriselna lam hawiah te leh artui anmahni duh thua hralh kawngah te remruatnate an neih pui ve bawh thin a ni. Ar vulhtute pawh hetiang scheme lamah hian an la bengvar lo hle a, arvulh kawngah hriatna, ar thi tur venna lam leh natna tam tak kawnga venna kawngah hriatna an la nei chau em em bawh a ni. State tam takah chuan poultry co-operative-te hi artui leh archaw hralh kawnga hma latu ang lekah an la ngaih theih a ni.

### 3.6.4 Poultry co-operative-te puibawm thei zirna inte

#### i) National Agricultural Co-operative Marketing Federation

National Agricultural Co-operative Marketing Federation of India (NAFED) hi ar vulhtuten hlawk zawka an dehchuah an hralh kawnga tanpuitu leh hnarkaitu ber atan ruat a ni a. NAFED hian ni tin artui vaibelchhe hnih zet lei thei tura beisei a ni, chumi artui chu kan ram pumpui ni khat artui dehchuah hmun thuma thena hmun khat ang vel a ni.

#### ii) National Co-operative Development Corporation

Arvulhin chak taka hma a sawn theih nan national co-operative development corporation (NCDC) hian mithiam zawkte hnen atangin ruahmanna, a taka hmantlak tur siam kawngah thurawn a la thin a. Hemiah hian poultry co-operative-te chu arvulh bakah archaw mamawh pek te leh artui hralh tur atana lakkhawm te ti thei turin ruahmanna siamsak an ni. NCDC hian poultry scheme hrang hrangte tihmasawn kawngah leh artui mai thei tur an member te hnenah sem chhuah kawngah nasa takin hma a la a ni. Five Year Plan pangana chhung khan NCDC hian ruahmanna tam tak loneimite mil turin a siam rem a. Cheng vaibelchhe 100 ngawt mai ruahmanin project 90 aia tam mah tihlawhtlin a rawt nghe nghe a ni.

#### iii) National Scheduled Caste and Scheduled Tribe Finance and Development Corporation

National Scheduled Caste and Scheduled Tribe Finance and Development Corporation (NSFDC) hi Scheduled caste leh Scheduled tribete khawsak dinhmun chawikan nana din a ni a, a bik takin chhungkaw lakluh poverty line limit let hnih hnuaia awm te tana tih a ni. NSFDC-te hian state sorkar kaltlangin Scheduled caste leh Scheduled tribe-te hnenah term loan leh an bul tanna tur sumte a ngaihtuhsak thin a ni.

#### iv) Poultry Egg and Meat Production Co-operatives

Poultry industry huang chhungah hian artui leh broiler dehchhuah hi kawng hran a ni a, co-operative-te hnathawh hmang pawh a dang hle a ni. Chuvang chuan, co-operative hrang pahnih an hming; Egg's Producers' Co-operatives leh Poultry Meat Producers' Co-operative-te a lo awmpah ta a ni.

a) **Egg Production Co-operative:** Ar vulhtute hian an mamawh reng reng arnote, archaw etc. angte hi co-operative atangin an hmuh vek a. National Egg Co-ordination Committee (NECC) te chuan thil man an bithliah a, chuvang chuan ar vulhtuten man inang an hmang tlang thei a ni. Artui tharchhuahte chu sawngbawl, bawngnhute te anglo takin a ngai ve lo va, a nihna anga hralhchhuah nghal zel theih a ni. Co-operatives te chuan an hralh dan kawng chu a enpui thin a, harsatna an tawh thin chu artui tam tham em em mai buaipui chu a ni. Artui dehchhuah nana senso za a 65-70 lai chu archaw atan hmanral a ni a, chuvang chuan co-operative-te chuan hemi kawngah an rilru an sen a ngai thin hle a ni. Co-operative tam tak te an hlawhchhamna fo chu an buaipui a tet tham vang leh an inrelbawl dan kawng a that tawk loh vang a ni fo thin a ni.

b) **Poultry Meat Production Co-operative:** India ramah hian broiler-te hi a nung chungah hralh an ni deuh berin hmun hla tak takah te leitu tur tamna hmunah phurh sawn an ni fo thin a ni. Broiler co-operative India rama mite hian ar vulhtute tan hamthatna sawi tham siam an nei lem lo va, heng mite hian a hralh chhawngtu hnenah broiler hi an hralh deuh ber a ni. Mimal thenkhatte pawhin arsa sawngbawl na hmun an nei ve nual a, mahse harsatna hrang hrang avangin

an thuanawp hle hlawm a ni. An harsatna tawh thenkhatte chu: bungraw mamawh heng vawnthatna khawl awm loh vang te, ar puah sa hralh chhhawna tur hmun neih loh vang te a ni deuh ber a ni. Poultry co-operative-te hian arsa sawngbawl kawngah tih theih nasa tak an nei thei ang a, amaherawhchu, bul tanna tur sum tam tham tak leh a hralh lehna tur hmun remchang a mamawh dawn a ni. Pawl thenkhat heng: All India Broiler Farmers Marketing Cooperative Limited (BROMARK) leh Broiler Coordination Committee (BCC) te hian ar man, bazar rate milin an bithliah thin a, hetiang kawng hian arsa hralh chhawngtute tan engemaw zawng tak chuan tangkaina an nei ve a ni.

- c) **Poultry Federation of India:** Poultry Federation of India (PFI) hi mipui leh sorkar inkara thu leh hla hlanchhawngtu ber a ni a. PFI tum ber chu: India rama poultry industry tih changtlunna tur atana thathawh kawng hrang hrang vawn nun hi a ni. PFI pawla mi nihna chuan a vulhtu, tharchhuaktu, hnathawktu, mamawh lakhawmtu leh sumdawna lama hnarkaitu ber ar vulh India mite tana a pawimawhna paw chhuaktute a huam a ni.

### 3.6.5 Poultry Co-operative-te hmachawp dinhmun

Poultry co-operative than lenna atana hmahlir chu tharchhuah hralhna lam hawi ni thei se a tha ang. Co-operative-te hnathawh ber chu thil man sang tur ven leh thil an hlutna vawnthat a ni ber a ni. An member puite dinhmun chawikang tur chuan co-operative-te chuan tlakchhiat thut theihna kawng hrang hrang: tharchhuah tlem thutna leh tharchhuah hralhna man tlakhniam thut thulhah te ruahmanna tha a nei tur a ni. Mumal taka poultry co-operative intelkhawm tha hetiang a tan hian a tul hle a ni. National Poultry Development Board (NPDB) pawh din turin rawtna a awm mek a ni. Poultry co-operative te reng reng chuan mi chhumchiate thawhchhuah atanga mi hausate thawhchhuah thlengin a ngaihtuah kim tur a ni.

---

#### I hmasawna enfiah rawh 5

**Note:** a) I chhanna te ziah nan a hnuaia hmunawl hi hmang rawh.

b) I chhanna chu zirlai tawp lam atang khan endik ang che.

1) A lampum ziak rawh:

- i) BROMARK .....
- ii) NAFED .....
- iii) NCDC .....
- iv) NECC .....
- v) NPDB .....
- vi) PFI .....

---

## 3.7 KHAIKHAWMNA

Kut hnathawktute zingah arvulh hi a thang chak berte zinga mi a ni a, a thanna pawh kum tin 8 – 10 per cent a ni. Artui leh arsa tharchhuah tam dan azirin arvulh lam hi ruangam 3ah a then theih a, chungte chu: chhungkaw bil tana arvulh, chaw tha petu atan, tlem tham deuh leh hlawk tham leh tam tham taka arvulh kawnga hmalakna te an ni. Chhim lam state pathum: Andhra Pradesh, Karnataka, Kerala leh Tamil Nadu te hian ram pum dehchhuah za 45 lai mai an tharchhhuak a ni. Arsa tharchhuah hi India ramah hian a nung chunga hralh chhuah a ni ber a, tunhnai mai atang khan

sawngbawl sa emaw dahvawh a hralh chhuah emaw tlem chu a awm ve a ni. Arvulh hi hnam hnuaiahnung zawkte zingah an pi pute hun lai ata tawh tun thlengin a la lar chho mek a ni. Tunhma hun ata tawh leh chhan dangte avangin arvulh hi hmeichhiate kutah a awm tam hle. Arvulh a lo punchhoh zelna avangin artui thar chhuah pawh 45 billions tling phain broiler pawh 2.1 billion tharchhuah theih a lo ni ta a ni, hetiang atan hian mihring maktaduai 5 lai an thawk bawk a ni. India ramah hian, poultry academic leh development institution-te hi hetiang hian thliar hran an ni: Veterinary Colleges, Poultry Academic and Research Organisations, Poultry Development Organisations leh Polytechnic and Training Institutions-te an ni. Ruahmanna tha siamtu pawl heng: Integrated Rural Development Programme (IRDP), Pradhan Mantri Gramin Sadak Yojana (PMGSY), Development of Women and children Area (DWCRA) etc. te pawh an awm a ni. Sorkar laipui leh state sorkar te pawhin arvulh kawngah tanpuina an pe thin bawk a ni. Arvulh lama hmasawna hmun state pakua zingah pahnih chauh Gujarat leh Maharashtraah co-operativeten tha takin hna an thawk thei a ni. National Egg Co-ordination Committee (NECC)te hian artui man an bithliah avangin ar vulhtu te zingah artui man a inkhairual theih phah a ni. All India Broiler Farmers Marketing Cooperative Limited (BROMARK) leh Broiler Coordination Committee (BCC) te hian bazar rate milin broiler leh arsa rate an siam a, hemi avang hian a zuar chhawngtute harsatna engemaw chen chu sutkian theih a ni.

### 3.8 THUMAL HMAN LEH A HRILHFIAHNA

- Billion** : Vaibelchhe 100 a tluk.
- Commercial Poultry System** : Mumal taka ruahman na hnuaia arvulh, ar chhungkhunga vulh leh thiamna sang tak hmanga ar chithlah vulhna. Ar tharchhuah tam thei tur neih chu a tum ber a ni a, senso tam tak ngai leh a tharchhuah pawh tam tak, artui pui khatin 300 aia tam mah kumkhata tharchhuak thei vulh te a ni.
- Dormant** : Engemaw avanga thuanawp, hnathawklo, emaw hman tangkai loh.
- Family Poultry System** : Thingtlang arvulh, ar tlem te 20 vel awrh chhungkhatin vulh a, hmeichhiaten arvulh an ti deuh ber bawk.
- Incentive** : Ti thathotu, chawkpur thei.
- Million** : Nuai 10 a tluk.
- Poultry Venture Capital Fund** : Sorkar laipui ruahman na, loneimite tan sum tanpuina a pe thin a, arvulh lam hawi felfai taka inzawmkhawm leh felfai taka inzawm lem lote tan pawh tanpuina a ruahman bawk.
- Smallholding Poultry System** : Arvulh, a chhungkhung emaw chhungkhung lo emaw a vulh, a vulhtutena chaw tha hmuh nana an hman leh an tharchhuah thenkhat an hralh ve bawkna. Ar pawh a za tel a tanga a sang bia vulhna.
- Tonne** : 1,000 kilogram a tluk.

### **3.9 LEHKHABU CHHIARBELH ATANA RAWNTE**

AHD. 1993. Animal Husbandry and Dairying. *Report of the Technical Committee of Direction for Improvement of Animal Husbandry and Dairying*, GOI, New Delhi.

Sachdev, A P. 2001. *Marketing System in India*, Blue Cross Consultants, New Delhi, India, Unpublished Report.

Shyam Sunder, Raju M.V.L.N. and Rama Rao, S.V. 1999. *Strategy of Commercial and Backyard Poultry Production in 21<sup>st</sup> Century in India*, Project Directorate on Poultry, Hyderabad, India.

### **3.10 LEHKHABU RAWNTE**

AHD. 1993. Animal Husbandry and Dairying. *Report of the Technical Committee of Direction for Improvement of Animal Husbandry and Dairying*, GOI, New Delhi.

AHD. Poultry Development, Government of India, Ministry of Agriculture, Department Of Animal Husbandry, Dairying and Fisheries, New Delhi. <http://ahdhp.org/poultrydevelopment.htm>

AHD. 2005 *Draft National Poultry Policy*. Government of India, Ministry of Agriculture, Department of Animal Husbandry, Dairying and Fisheries, New Delhi, India.

Model Bankable Projects: *Animal Husbandry Volume II: Broiler Farming*. <http://www.nabard.org/modelbankprojects/animalbroiler.asp>

Model Bankable Projects: *Animal Husbandry Volume II: Layer Farming*. <http://www.nabard.org/modelbankprojects/animallayer.asp>

Prabakaran, R. 2003. *Good Practices in Planning and Management of Integrated Commercial Poultry Production in South Asia*. FAO Animal Production and Health Paper 159, FAO, Rome.

Sachdev, A P. 2001. *Marketing System in India*, Blue Cross Consultants, New Delhi, India, Unpublished Report.

Shyam Sunder, Raju M.V.L.N. and Rama Rao, S.V. 1999. *Strategy of Commercial and Backyard Poultry Production in 21<sup>st</sup> Century in India*, Project Directorate on Poultry, Hyderabad, India.

### **3.11 IHMASAWNNA ENFIAH NANA CHHANNA TE**

#### **I hmasawwna enfiah rawh 1**

- 1)
  - i) DRDA District Rural Development Agency
  - ii) GDP Gross Domestic Product
  - iii) KVK Krishi Vigyan Kendra
  - iv) NGO Non-Governmental Organisation
  - v) NABARD National Bank for Agriculture and Rural Development
- 2)
  - i) 45
  - ii) 2.1
  - iii) 45
  - iv) 1.8 kg
  - v) Rs.300 billion

**I hmasawwna enfiah rawh 2**

- 1) A chhanna pe rawh
  - i) 5 million
  - ii) 80%
  - iii) 50%
  - iv) poultry
  - v) women

**I hmasawwna enfiah rawh 3**

- 1) 

i) CARI	Central Avian Research Institute
ii) CPDO	Central Poultry Development Organisation
iii) ICAR	Indian Council of Agricultural Research
iv) PDP	Project Directorate on Poultry
v) STST	Short Term Specialized Training

**I hmasawwna enfiah rawh 4**

- 1) 

i) IRDP	Integrated Rural Development Programme
ii) PMGSY	Pradhan Mantri Gramin Sadak, Yojana
iii) RRB	Regional Rural Bank
iv) SCB	State Commercial Bank
v) SLDB	State Land Development Bank

**I hmasawwna enfiah rawh 5**

- 1) 

i) BROMARK	All India Broiler Farmers Marketing Coopertaive Limited
ii) NAFED	National Agricultural Co-operative Marketing Federation of India
iii) NCDC	National Co-operative Development Corporation
iv) NECC	National Egg Coordination Committee
v) NPDB	National Poultry Development Board
vi) PFI	Poultry Federation of India



## Feedback Questionnaire

Dear Student,

You may have found certain portions of the text very interesting and some portions difficult to understand while studying the units of this block. We wish to know your difficulties and suggestions in order to improve the course. Therefore, kindly fill in this questionnaire pertaining to this block and send us this sheet. If you find the space provided insufficient, please use a separate sheet.

### Questionnaire

Enrolment No.

Course Code \_\_\_\_\_ Block No. \_\_\_\_\_

1. How many hours did you need for studying the units ?

Unit no.	1	2	3
<b>Number of Hours</b>			

2. Please give your reactions to the following items based on your studying the block:

Items	Excellent	Very Good	Good	Poor	<i>Give specific examples, if poor</i>
Presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Illustrations Used (diagrams, tables, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Conceptual Clarity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Check Your Progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Feedback to Check Your Progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

3. Any other comments: .....

.....

.....

Mail to: Programme Coordinator (CPF)  
School of Agriculture, IGNOU,  
Maidan Garhi, New Delhi, 110068