avb Pv‡l i mgm¨v I mgvavb

Problems and solution of rice production

evsjv‡`k avb M‡elYv Bbw÷wUDU (we)

MvRxcÿ|

iPbv, Mšbv I m¤úv`bvq
W. †gv: Rwnivj Bmjvg, W. †gv: Bmjvg DwÏb †gvjv, W. †gv: dRjyj Bmjvg I †gv: kvnv`vZ †nv‡mb

KwiMix mnvqZvq
weAvi‡Kwe IqvwKs M¨vc

Aww_K mnvqZvq
weAvi‡Kwe-we-GbGwUwc-weGAviwm Dc-cKí

cwiKíbv, M‡elYv I mwweK ZËveav‡b
W. †gv: Bmjvg DwÏb †gvjv

wWRvB‡b
†gv: Avãyj gvbvb

evsjv‡`k avb M‡elYv Bbw÷wUDU (we), MvRxcyj|

mwPcÎ

µwgK bs	we`q	cÖv bs
1.	av‡bi Pvi msµvš	1
2.	av‡bi RvZ msµvš	2
3.	nvBweW av‡bi RvZ msµvš	3
4.	Rwg I gwU msµvš	4
5.	mvi msµvš	5
6.	¸wU BDwiqv msµvš	9
7.	Gjwmwm msµvš	10
8.	av‡bi AvMvQv msµvš	10
9.	av‡bi ‡cvKv msµvš	11
10.	Bùvÿ msµvš	12
11.	KxUbvkK msµvš	13
12.	av‡bi ‡ivM msµvš	15
13.	†mP msµvš	17
14.	Liv msµvš	18
15.	eb¨v msµvš	19
16.	jeYv³Zv msµvš	21
17.	kxZ msµvš	22
18.	av‡bi wPUv msµvš	23
19.	avb MvQ †n‡j cov msµvš	23
20.	k¨vIjv msµvš	24
21.	fvZ msµvš	24
22.	Avgb PvI msµvš	25
23.	av‡bi djb msµvš	25
24.	avb KvUv msµvš	26
25.	avb exR msµvš	26

avb Pv‡li mgm¨v I mgvavb

avb Avgv‡`i cavb dmj I Lv`¨km¨| avb Pvl G‡`‡ki A_bxwZi mv‡_ I‡Zv‡cvZ fv‡e RwoZ| Z‡e avb Pvl wb‡q Kl‡Kiv wewfb mgq bvbvwea mgm¨vi mg¥Lxb n‡q _v‡Kb| G m‡ei g‡a¨ eb¨v, Liv, wkjvewó, jeYv³Zv, †cvKvgvKo, †ivMevjvB, AwZwi³ ZvcgvÎv I kxZ cavb| Gme Kvi‡Y dj‡bi cfZ ¶wZmvwaZ n‡q _v‡K| Gme cwZKj-Zv †gvKv‡ejv K‡i wbw`ó cwigvY Rwg‡Z Aí Li‡P †ewk avb Drcv`b K‡i Lv`¨ wbivcËv wbwðZ Kiv Avgv‡`i cavb j¶¨| Gme cvKwZK `ÿhvM I Ab¨vb¨ mgm¨v †gvKv‡ejv Kivi Kjv‡KŠkj m¤c‡K mg¨vK Ávb _vwK‡j Kw•ÿZ djb ARb Kiv m¤e| Z‡e †Kvb †Kvb †¶‡Î ce-c¯wZi c‡qvRb n‡q _v‡K| ckvKv‡i avb Pv‡li cavb cavb mgm¨v I Zvi e¨vL¨v Ges mswkó mgvavb mgn-wb‡g c`Ë nj|

1. av‡bi Pviv msµvš

Av`k exRZjv

mȳ mej Pviv

1.1 mȳ mej Pviv Drcv`‡b Kx fv‡e cwicó fvj exR evQvB Kiv hvq Ges Gi c‡qvRbxqZv Kx?

fvj exR gv‡b mȳ mej Pviv Drcv`b| exR evQvB c×wZi gva¨‡g cwicó fvj exR evQvB Kiv hvq| †ev‡iv, AvDk I Avgb wZb †gŠmÿgB exR evQvB Ki‡Z n‡e| evQvBKZ ‡ivMgy³ cwi®vi I cwicó exR AwaK AsK‡iv`Mg ¶gZv m¤úb n‡q _v‡K|

exR evQvB c×wZ

- `k wjUvi cwi®vi cvwb‡Z 375 Mvg BDwiqv mvi wgkvb
- G‡Z 10 †KwR exR †Q‡o nvZ w`‡q †b‡o‡P‡o wbb
- nvZ ev Pvjwb w`‡q fvmgvb A_ev Acó exR mwi‡q †djb
- Wyš fvix exR¸wj cwi®vi cvwb‡Z 3-4 evi fvj fv‡e a‡q wbb|

exR evQvB c×wZ

1.2we‡kl hZmnKv‡i Pviv DVv‡bvi c‡qvRb †Kb?

Pvivi wkKo wQ‡o †M‡j †ivc‡Yi ci Pvivi evo-evowZi †Kvb Amyeav nq bv| Z‡e KvÛ wQ‡o †M‡j ev ‡f‡½ †M‡j Pvivi evo-evowZ A‡bK wejw¤Z nq Ges Kvk MRv‡Z †`wi nq|

hZmnKv‡i Pviv DVv‡bv

e¨e¯vcbv

- Pviv DVv‡bvi Av‡M exRZjvq †ewk K‡i cvwb w`‡q gvwU wfwR‡q big Ki‡Z n‡e
- hZ mnKv‡i Pviv DVv‡Z n‡e hv‡Z Pvivi KvÛ ev ‡Mvov ‡f‡½ bv hvq
- Pviv †Zvjvi ci cv‡q AvNvZ ev AvQvo w`‡q gvwU cwi®vi Kiv hv‡e bv
- Pviv DVv‡bvi ci †mB Pvivi cvZv w`‡q AvwU evaw I DwPZ bq
- ïK‡bv Lo wfwR‡q AvwU eva‡Z n‡e|

1.3 mwVK eq‡mi Pviv e¨envi‡i c‡qvRb †Kb?

Pvivi eqm †ewk n‡j Dchy³ djb cvIqv m¤e bq| ‡hgb †ev‡iv‡Z we avb29 Gi Pvivi eqm 50 w`‡bi †ewk n‡j cwZ w`‡bi Rb¨ weNvq 8.4 †KwR K‡i djb K‡g|

20 w`b eq‡mi Pviv

Dchy³ Pvivi eqm

- AvD‡kt 20-25 w`b
- Avg‡bt 25-30 w`b Ges
- †ev‡iv‡Zt 35-45 w`b nIqv DwPZ|

Z‡e bwe‡Z jvMv‡bv Avgb av‡bi Pvivi eqm †ewk n‡j cwZ †MvQvq 5-7wU K‡i Pviv †ivcY Ki‡Z n‡e| bwe‡Z ev ‡`wi‡Z Avg‡bi Pviv jvMv‡bvi †¶‡Î Av‡jvKms‡e`bkxj Rv‡Zi Pvivi eqm 30-40 w`b nIqv DwPZ|

1.4 av‡bi Pvivi ¶wZ bv K‡i cwien‡bi wbqgvewj Kx?

hZmnKv‡i av‡bi Pviv exRZjv †_‡K gj¬ Rwg‡Z enb Kiv DwPZ| Zv bv n‡j en‡bi mgq Pv‡c, Zv‡c ev AvNv‡Z Pvivi ¸YMZ gvb bó n‡q †h‡Z cv‡i| d‡j Pvivi evo-evowZ K‡g hv‡e|

cwien‡bi wbqgvewj

- Pviv en‡bi mgq cvZv ev KvÛ †gvov‡bv cwinvi Ki‡Z n‡e
- Sz‡o ev U‡K wi‡Z mwi K‡i mwR‡q cwienb Ki‡Z n‡e
- e¯ve›`x K‡i av‡bi Pviv †Kvbµ‡gB enb Kiv DwPZ bq|

2. av‡bi RvZ msµvš

wevAvi8

wevAvi16

wevAvi19

weavb44

2.1 So-SÅvq avb S‡i c‡o bv Ggb RvZ †Kvb¸‡jv?

S‡ov nvIqvq Ges wkjvewó‡Z cvKv avb S‡i c‡o dj‡bi cfz¤ ¶wZmwaZ nq| Gme †¶‡G Ggb me RvZ PvI Ki‡Z n‡e †h¸‡jvi avb wk‡li mv‡_ k³ fv‡e †j‡M_v‡K|

Rv‡Zi ˆewkó¨

- S‡ov nvIqvq Ges wkjvewói †¶‡Î wevAvi8 Ges wevAvi9 RvZ `ÿU we‡klfv‡e Dc‡hvMx, KviY wevAvi8 Ges wevAvi9 Rv‡Zi avb wk‡li mv‡_ k³ fv‡e †j‡M_v‡K weavq S‡i c‡o bv
- So-SÅv Ges wkjvewó ceY GjvKvq G RvZ `ÿU PvI K‡i AwaK djb cvIqv m¤e|

2.2 nvIo AÂ‡j i Dc‡hvMx †ev‡ivi RvZ Kx Kx?

†ev‡iv avb cvKvi mgq nVvr AvMvg Xj ev eb¨vq cvKv avb Zwj‡q hvq weavq avb KvUv hvq bv| ZvB Gme †¶‡G j¤v Rv‡Zi Ddkx avb PvI Kiv DwPZ|

wevAvi18

Rv‡Zi ˆewkó¨

- nvIo AÂ‡j wevAvi17, wevAvi18 Ges wevAvi19 PvI Kiv evÃbxq
- G Rv‡Zi Mv‡Qi D”PZv 115-125 †mwg
- eb¨vq gv‡V †Kvgi cwb n‡j I Gme Rv‡Zi dmj KvUv hvq
- AZGe, nvIo AÂ‡j i Rb¨ G RvZ¸‡jv we‡klfv‡e Dc‡hvMx|

2.3 Avg‡b AjeYv³ ‡Rvqvi-fvUv GjvKvi RvZ †KvbwU Ges Gi ˆewkó Kx?

evsjv‡`‡ki `¶YvÂ‡j i AjeYv³ †Rvqvi-fvUv Kewjwe¯b GjvKv i‡q‡Q, †hLv‡b wbqwgZ †Rvqvi-fvUv nq| Gme GjvKvq j¤v I KvÐk³ Rv‡Zi avb PvI Kiv DwPZ|

Rv‡Zi ˆewkó¨

- we avb44 †Rvqvi-fvUv GjvKvq †hLv‡b 50-60 †mw›UwgUvi chš †Rvqv‡ii cwb Av‡m †mLv‡b PvI Dc‡hvMx
- RvZwU wevAvi11 Gi PvB‡Z 10-15 †mw›UwgUvi j¤v nIqv m‡ZI KvÛk³ _vKvq mn‡R †n‡j c‡o bv
- Gi RxebKvj 145 w`b Ges weNv cwZ djb 24 gY
- †Rvqvi-fvUv GjvKvq †ivc‡Yi Rb¨ Pviv hZeo n‡e ZZB fvj
- ZvB Gi exR 20-25 ˆR¨‡ôi g‡a¨ ecb Ki‡j †ivc‡Yi Rb¨ Pvivi eqm 40-50 w`b n‡e|

2.4 Wvqv‡ewUK †ivMxi Dc‡hvMx av‡bi RvZ †KvbwU?

fv‡Z mvaviYZ Kv‡evnvB‡W‡Ui cwigvY †ewk A_vr 100 Mvg fv‡Z cvq 25-28 Mvg Kv‡evnvB‡WU _v‡K| AwZwi³ Kv‡evnvB‡WUhy³ †Kvb Lvevi †L‡j i‡³ mÿv‡ii cwigvY †e‡o hvq hv Wvqv‡ewUK †ivMx‡`i Rb¨ ¶wZKi| Avevi †hme av‡bi Rv‡Z MvBwmwgK Bb‡W· ‡ewk, †m¸‡jv †L‡j i‡³ mÿv‡ii cwigvY AwZ ZvovZwo †e‡o Wvqv‡ewUK †ivMx‡`i †ewk ¶wZ K‡i| †h me av‡bi Rv‡Z G¨vgvB‡jv‡Ri cwigvY †ewk (25-30%) A_vr fvZ k³ I SiS‡i Zv‡Z MvBwmwgK Bb‡W· Kg (50 Gi wb‡P)| wm× Pv‡j (Pressure parboiled) MvBwmwgK Bb‡W· AvZc Pvj †_‡K A‡bK Kg | Abÿc fv‡e ev`wg Pv‡j (Brown rice) A_vr †XukQuv Aa Kvov Pv‡j wg‡jQuv mv`v Pvj (Polish rice) A‡c¶v Kg MvBwmwgK Bb‡W· _v‡K weavq Wvqv‡ewUK †ivMx‡`i Rb¨ Zv †ewk Dc‡hvMx| ZvQvov mv`v Pv‡j Auki cwigvY Kg _v‡K| Aci w`‡K ev`wg Pv‡j Køv _vKv‡Z Auki cwigvY †ewk _v‡K e‡j Wvqv‡ewU‡Ki Sy‡K K‡g| Z‡e Wvqv‡ewUK †ivMx‡`i †Kvbµ‡gB cwigv‡Yi AwZwi³ Kv‡evnvB‡WUhy³ Lvevi (fvZmn Ab¨vb¨) Lvlqv DwPZ bq|

KiYxq

- AvšRwZK chv‡q M‡elYvq †`Lv †M‡Q wm× Pv‡j (Pressure parboiled) mewbg (27) MvBwmwgK Bb‡W· _v‡K weAvi16 Rv‡Z Ges m‡Ÿv”P (87) mvb‡Mvì evÛ bvgK big Auv‡jv fv‡Zi Pv‡j | ZvB mwVK fv‡e cwµqvRvZKZ. (Pressure parboiled) weAvi16 Rv‡Zi Pv‡ji fvZ cwiwgZ cwigv‡Y Wvqv‡ewUK †ivMxiv †L‡Z cv‡ib hv Ab¨vh †Kvb Rv‡Zi †P‡q A‡bK wbivc`
- Wvqv‡ewUK †ivMxiv AvZc Pvj bv†L‡q wm× Kiv Pv‡ji SiSiv fvZ Lvlqv DwPZ
- i‡³i mÿvi wbqš‡Yi Rb¨ Wvqv‡ewUK †ivMx‡`i wg‡jQuv mv`v Pv‡ji cwie‡Z †XukQuv ev`wg Pv‡ji fvZ Lvlqv DwPZ|

Wvqv‡ewUK †ivMxi Dc‡hvMx RvZ weAvi16

3. nvBwewW av‡bi RvZ msµvš

we nvBwewW avb1

we nvBwewW avb2

we nvBwewW avb3

we nvBwewW avb4

3.1 nvBwewW avb Pvl gwU I cwi‡e‡ki ¶wZ K‡i Kx?

nvBwewW I BbwewW DfqB av‡bi D”P djbkxj RvZ (Ddkx)| nvBwewW I BbwewW Gi Pvlvev‡`i g‡a¨ †Zgb †Kvb cv_K¨ bvB| Z‡e gwUi DeiZv avb Drcv`‡bi †¶‡Î we‡kl ¸‡jZc¥| gwUi DeiZv ej‡Z e§vq gwU‡Z Mv‡Qi AZ¨vek¨K Lv`¨vcv`vbmgn-MnY‡hvM¨ mwVK ivmvqwbK Ae¯’vq mwVK cwigv‡Y Av‡Q Kx bv| gwUi DeiZv Qvovl km¨ Drcv`‡bi †¶‡Î cwi‡ek, †hgb-Avenvlqv, cwbi cvc¨Zv, †cvKvgvKo, †ivMevjvB BZ¨vw` ¸‡jZc¥ fwgKv cvjb K‡i _v‡K| k‡m¨i wbweoZv e¨w×, µwUc¥ mvi, cwb I km¨ e¨e¯’vcbv Ges ‰Re mvi Kg e¨envi‡ii d‡j gwUi DeiZv kw³ w`b w`b K‡g hv”Q| Bnv mKj Ddkx avb Pvlvev‡`i †¶‡Î mg fv‡e c‡hvR¨| Ddkx avb Avev‡` gwU I Avenvlqvi ¶wZ †_‡K i¶v cvlqvi Rb¨ c‡qvRbxq e¨e¯’vcbv †hgb-

e¨e¯’vcbv

- Dchy³ I mwVK RvZ wbevPb
- mwVK mvi, mwVK gvÎvq, mwVK mg‡q, mwVK c×wZ‡Z e¨envi Kiv
- ‰Re mv‡ii e¨envi wbwðZ Kiv
- mwVK cwb e¨e¯’vcbv Abymi Y Kiv
- mgqgZ †cvKvgvKo I †ivMevjvB `gb Kiv
- Dc‡iv³ wel‡q wbwðZ n‡Z cvi‡j nvBwewW I BbwewW avb Pv‡l gwU I Avenvlqvi †Kvb ¶wZ nlqvi m¤vebv ‡bB|

3.2 nvBweW av‡bi dmj †_‡K exR ivLv hv‡e Kx?

bxwZMZfv‡e `ÿZv wfb ¸Y wewkó Rv‡Zi m¼ivq‡bi d‡j †h c_g cR‡bi (F1) D™e nq Zv‡K nvBweW avb ejv nq| nvBweW av‡b m¼imvej¨Zvi (Heterosis effect) Rb¨ `vbvi IRb, Mv‡Qi D”PZv, QWvq av‡bi msL¨v evovi d‡j nvBweW avb Ab¨vb¨ D”P djbkxj Rv‡Zi †P‡q 15-20% †ewk djb w`‡q _v‡K hv ïaygvÎ F1 ev c_g cRb¥ †_‡KB cvIqv hvq|

Kvi Y mgn¨

- Ddkx RvZ¸‡jv cv_wgK m¼ivq‡bi ci lô (F6) ev mßg (F7) cRb¥ †_‡K evQvB Kiv nq weavq RvZ¸‡jv †KŠwjZwËK fv‡e mgwgkb (Homozygous) RvZ, ZvB D³ RvZwUi ‰ewk‡ó¨i Avi ‡Zgb †Kvb cwieZb nq bv
- Aciw`‡K, `ÿZv wfb ¸Y wewkó Rv‡Zi m¼ivq‡bi d‡j †h c_g cR‡bi D™e nq Zv †KŠjZwËK fv‡e Amgwgkb (Heterozygous) n‡q _v‡K hv cieZx esk ci¯úivq w¯wZkxj _v‡K bv weavq F2-F6 chš RvZ ev av‡bi ‰ewkó¨ wfb wfb n‡Z _v‡K, †hgb MvQ DPybPyQov j¤v ev Lv‡Uv, avb †gvUv-wPKb, dzj Av‡M c‡i Avmv, GK mv‡_ bv cvKv, Kwdk Kg-†ewk nIqv BZ¨vw` BZ¨vw`; djkxZ‡Z djbI K‡g hvq
- ZvB gv‡V †ivcYKZ nvBweW avb dmj †_‡K exR ivLv †gv‡UI DwPZ bq|

4. Rwg I gwUmsµvš

cvIqvi wUjv‡i Rwg PvI

Mi¤ w`‡q PvI

PvI w`‡q Rwg †d‡j ivLv

Rwg mgvb Kiv

4.1 erm‡i GKB Rwg‡Z KZ ev‡i avb PvI Kiv DwPZ?

evsjv‡`‡ki Kwl.cavbZ avb PvI †K›`K| DbZ km¨µ‡gi K_v wPšv bv K‡i erm‡i GKB Rwg‡Z 2-3 ev‡i avb PvI Kiv n‡”Q| Zv‡Z K‡i avb ev‡` Ab¨vb¨ dm‡ji Rb¨ Avgiv Avg`vbxwbfi n‡q cowQ| ZvQvov Rwg‡Z GKB dmj ev‡i ev‡i PvI Kivq gwUi ¸Yv¸Y I DeiZv kw³ w`bw`b †jvc cv‡”Q| Dciš †cvKvgvKo I †ivMevjvB e¨vL¨v †c‡q cwi‡e‡ki ¶wZ mvab Ki‡Q| G Ae¯v Pj‡Z _vK‡j fwel¨‡Z gwUI cwi‡ek avb Pv‡li A‡hvM¨n‡q †h‡Z cv‡i|

e¨e¯vcbv

- erm‡i GKB Rwg‡Z GKwU avb dmj Kiv m‡ev‡Ëg; †Kvb µ‡gB `ÿZvi †ewk avb dm‡ji PvI Kiv DwPZ bq
- avb Pv‡li Avq e¨‡qi wnmv‡e †`Lv †M‡Q, Ab¨ dm‡ji mv‡_ GKwU ev `ÿZv avb dm‡ji web¨vm GKav‡i 3wU avb dmj PvI †_‡K jvfRbK| mZ¨vs, erm‡i GKB Rwg‡Z GKwU ev `ÿZv avb dm‡ji †ewk PvI Kiv wVK bq|

4.2 Rwg mgvb Kiv c‡qvRb †Kb?

Rwg mgvb bv n‡j DPyRvqMvi gwnU ïwK‡q Ges wbPyRvqMvq Pviv W‡e g‡i †h‡Z cv‡i| ZvQvov mv‡ii, we‡klK‡i bvB‡Uv‡R‡bi e¨envi mgvb nq bv| Zv‡Z MvQ DPybPyn‡e Ges AvMvQvi AvµgY ev‡o| fvjfv‡e 3-4wU PvI I gB w`‡q Rwg mgvb Ki‡Z n‡e| c‡qvR‡b †Kv`v‡ji mvnv‡h¨ Rwg mgvb Kiv †h‡Z cv‡i|

Amgvšivj Rwg

c‡qvRbxqZv

- Rwg mgvb n‡j mg¯Z Rwg‡Z mgvšivj fv‡e cwb_vK‡e
- AvMvQvi Dc`c Kg n‡e Ges avb GKmv‡_ cvK‡e|

4.3 gwUi DeiZv kw³ e¨vL¨v Kiv i Dcvqmgn¨Kx?

km¨ Drcv`‡bi wbweoZv e¨vL¨v Ges D”P djbkxj Rv‡Zi PvIev‡`i d‡j gwUi ^Re Ges A‰Re c`v_ `ªZ ¶q n‡”Q| c¶vš‡i gwUi ^Re c`v‡_i mwVK e¨e¯vcbvi w`‡K j¶¨ bv‡i‡L wbwePv‡i Ges Amg gvÎvq A‰Re mv‡ii e¨envi‡i d‡j Avgv‡`i Rwgi DeiZv kw³ w`bw`b K‡g hv‡”Q| G Ae¯v `xN w`b Pj‡Z _vK‡j Avgv‡`i gwUi Drcv`b ¶gZv nvm cv‡e| ‡`‡ki Lv`¨ Pwn`v ci‡Yi Rb¨ gwUi DeiZv nv‡mi GB ceYZv †iva K‡i DeiZv e¨vL¨v I Zv msi¶Y Kiv AZ¨vek¨K| G Rb¨ Dchy³ gvÎvi ivmvqwbK mv†ii cvkvcwk c‡qvRb ‰Re mv‡ii e¨envi e¨vL¨v Kiv|

Dcvqmgn-

- %Re mvi‡K gwUi DeiZvi cvY wnmv‡e MY¨ Kiv nq| ZvB %Re ev meyR mvi †hgb- †Mvei, AveRbv, K‡¤úvó, %aÂv, nvm-gyiMi weôv BZ¨vw` Rwg‡Z eQ‡i GKevi n‡j I weNv cwZ 800 †KwR c‡qvM Ki‡Z n‡e
- k‡l¨i Aewkósk Rwg‡Z fvj fv‡e wgwk‡q w`‡Z n‡e
- evi evi GKB dmj bv K‡i DbZ kl¨µ‡gi cPjb Ki‡Z n‡e

meyR mvi gwU‡Z c‡qvM

gwUi †fŠZ I ivmvqwbK ¸Yvejxi Dci ˆRe c`v‡_i cfve

- gwU‡Z ˆRe c`v‡_i cwigvY ev‡o
- gwUi ¯’vQ`Zv e„× K‡i hvi gva¨‡g evZvm Pjvj K‡i
- gwUi cwb avi Y ¶gZv e„× K‡i
- Mv‡Qi MnY‡hvM¨ A‡bK Lv`¨vcv`vb gwU‡Z e„× cvq A_vr gwUi Lv`¨ fvÐvi mg„× K‡i
- gwU¯ DcKvix RxevYyi Kg¶gZv I KvhKwiZv e„× K‡i|

5. mvi msµvš

BDwiqv

wUGmwc

Ggl wc

5.1 Kx fv‡e mv‡ii gvÎv wbaviY Kiv DwPZ?

fvj dj‡bi Rb¨ myiyg mv‡ii c‡qvRbxqZv Acwinvh| mwVK mvi, mwVK mg‡q, mwVK gvÎvq c‡qvM bv Ki‡j djb A‡bKvs‡k K‡g hvq| mvi e¨envi K‡i AwaK Drcv`b I Aww_Kfv‡e jvfevb nIqvB mK‡ji Kvg¨| mvi c‡qv‡Mi mgq wb‡¤i e¨e¯cbvi cwZwe‡kl fv‡e bRi ivLv c‡qvRb|

e¨e¯vcbv

- Avenv Iqv I gwUi DeiZvi gvb, av‡bi RvZ, RxebKvj I djb gvÎv BZ¨vw`i Dci wfwË K‡i mv‡ii gvÎv wVK Kiv Acwinvh
- mv‡ii KvhKwiZv e„×i Rb¨ †Kvb mvi KLb I Kx fv‡e c‡qvM Ki‡Z n‡e Zv ‡R‡b c‡qvM Kiv DwPZ|

5.2 mwVK gvÎvq mvi c‡qv‡Mi c‡qvRbxqZv †Kb?

av‡bi †gŠmgy, RvZ, gwUi DeiZv I cwi‡e‡ki Dci wfwË K‡i mv‡ii c‡qvRbxqZv Kg †ewk n‡q _v‡K| mwVK gvÎvq mvi bv w`‡j †hgb djb K‡g hvq †Zgwb AwZwi³ mvi MvQ mn¨ Ki‡Z cv‡i bv| AwaK gvÎvq bvB‡Uv‡Rb mvi w`‡j A‡nZzK A½R e„× N‡U, MvQ mn‡R †n‡j c‡o I djb K‡g hvq, av‡bi wPUv, †ivMevjvB I †cvKvgvK‡oi Avµgy †ewk nq| ZvQvov AZ¨waK dmdivm mvi e¨envi MvQ Ab¨ mvi MnY Ki‡Z cv‡i bv|

c‡qvRbxqZv

- av‡bi Rwg‡Z mwVK gvÎvq mvi e¨envi Ki‡j Mv‡Qi evo-evowZ, Kzk I cvZvi msL¨vi g‡a¨ fvimvg¨ eRvq _v‡K, d‡j me¸‡jv cvZv Av‡jv evZvm cvq Ges Ac‡qvRbxq Kzk MRvq bv
- Zv‡Z av‡bi wPUv Kg nq Ges avb cÖvnIqv‡Z djb ev‡o|

†ÿ‡Z BDwiqv mvi e¨envi

5.3 BDwiqv mvi GKev‡i c‡qvM bv K‡i K‡qKev‡i †`qv nq †Kb?

BDwiqv mv‡ii KvhKwiZv Rwg‡Z ¶Y¯vqx A_vr Aí mg‡qi Rb¨ _v‡K| c‡qvMKZ.bvB‡Uv‡Rb, wWbvBwUwd‡Kk‡bi gva¨‡g AcP‡qi cwigvY 30-40%, †fvjwUjvB‡Rk‡bi gva¨‡g ¶wZ n‡Z cv‡i 60% Ges cwbi mv‡_ GK Rwg †_‡K Ab¨ Rwg‡Z P‡j ‡h‡Z cv‡i 13-16% chš| Gme Kvi‡Y c‡qvMKZ bvB‡Uv‡R‡bi 30-40% Gi †ewk MvQ MnY Ki‡Z cv‡i bv| hZ fvj fv‡eB mvi c‡qvM Kiv †nvK bv †Kb 60-65% Gi ‡ewk Mv‡Qi MnY‡hvM¨ nq bv| A_P avb Mv‡Qi m¤c¥Rxebkvj e¨vcx bvB‡Uv‡Rb mv‡ii c‡qvRb nq| Z‡e me PvB‡Z †ewk c‡qvRb nq Kzk MRv‡bvi c_g avc (Primary tillerting) †_‡K Avi¤ K‡i Kzk MRv‡bvi gvSvgwS mgq chš I KvBP‡_vo Ae¯vq|

e¨e¯vcbv

- av‡bi fvj djb †c‡Z n‡j BDwiqv mvi GKev‡i c‡qvM bv K‡i mwVK gvÎvq mwVK mg‡q c‡qvM Ki‡Z _n†e
- BDwiqv mvi mgvb wZb wK¯‡Z c‡qvM Kiv DwPZ| c_g wK¯ Pviv †ivc‡Yi 7-10 w`b ci, w`Zxq wK¯ †MvQvq 4-5wU Kzk †`Lvw`‡j Ges ZZxq wK¯ KvBP†_vo Avi‡¤i 5-7w`b Av‡Mw`‡Z n‡e|

5.4 BDwiqv mv‡ii KvhKwiZv ewµ× Kivi Rb¨ Kx Kiv DwPZ?

BDwiqv mvi gwU‡Z ¶Y¯vqx Ges wewfb Kvi‡Y AcPq n‡q hvq| avbMvQ mvavi YZ c‡qvMKZ bvB‡Uv‡Rb mv‡ii 30-40% Gi †ewk MnY Ki‡Z cv‡i bv| Dchy³ cwi‡ek bv †c‡j AcP‡qi cwigvY Av‡iv †e‡o †h‡Z cv‡i| ZvB wbqgvbyqx mZKZvi mv‡_ BDwiqv mvi c‡qvM Ki‡Z n‡e|

e¨e¯vcbv

- BDwiqv mvi †h‡nZzgwU‡Z ¶Y¯vqx, ZvB avbPv‡I BDwiqv mvi mgvb wZb wK¯‡Z mgvb fv‡M fvM K‡i c‡qvM Ki‡Z n‡e
- BDwiqv mv‡ii KvhKwiZv ewµ×i j‡¶¨ Dcwi c‡qvM K‡i wbowb hš¿ ev DBWvi w`‡q AvMvQv cwi®vi mn gwUi mv‡_ fvj fv‡e wgwk‡q w`‡Z n‡e Ges cieZx‡Z Rwg‡Z wQcwQ‡c cwb ivL‡Z n‡e
- BDwiqv Dcwi c‡qv‡Mi mgq j¶¨ ivL‡Z n‡e †hb G mgq Rwg ïK‡bv wKsev Lye †ewk cwb bv_v‡K| Rwg‡Z AwZwi³ cwb _vK‡j mvi c‡qvM Kivi Av‡M Zv †ei K‡i w`‡Z n‡e| ZvQvov cvZvq cwb R‡g _vKv Ae¯vq BDwiqv Dcwi c‡qvM Kiv DwPZ bq|

5.5 Kx fv‡e avb Mv‡Qi bvB‡Uv‡R‡bi mßg ¶zav `i‡K‡i AwaK djb cvIqv hv‡e?

¸wU BDwiqv e¨envi‡i memgq Mv‡Qi c‡qvRb Abyhvqx bvB‡Uv‡Rb mieivn Kivq Mv‡Qi †Kvb mßg ¶zav _v‡K bv weavq dj‡b †Kvb KgwZ nq bv| ZvQvov ¸wU BDwiqv e¨envi‡i mv‡ii KvhKwiZv kZKiv 20-25 fvM ewµ× cvq| d‡j BDwiqv mvi Kg jv‡M| Avevi ¸wU BDwiqv Rwg‡Z gvÎ GKeviB c‡qvM Ki‡Z nq|

¸wU BDwiqv c‡qvM

e¨e¯vcbv

- ¸wU BDwiqv mvi c‡qv‡Mi Rb¨ mwie×fv‡e av‡bi Pviv †ivcY Ki‡Z n‡e| mwi †_‡K mwi Ges †MvQv †_‡K †MvQvi `i‡Z n‡e 20 †mw›UwgUvi
- ‡ev‡iv †gŠmy¤ú Pviv †ivc‡Yi 15-20 w`b Ges AvDk I Avg‡b Pviv †ivc‡Yi 7-10 w`‡bi g‡a¨ cwZ Pvi †MvQvi gvSLv‡b 7-10 †mw›UwgUvi Kv`vi Mfx‡i ¸wU cÖZw`‡Z n‡e
- mvavi YZ AvDk I Avg‡b 1.8 Mvg IR‡bi GKwU ¸wU Ges †ev‡iv‡Z 2.7 Mvg IR‡bi GKwU ¸wU e¨envi Ki‡Z n‡e
- ¸wU c‡qv‡Mi ci Rwg‡Z me mgq c‡qvRbxq 2-3 †mw›UwgUvi cwb a‡i ivL‡Z cvi‡j fvj
- mgq Ges A_ mvk‡qi Rb¨ we ¸wU BDwiqv c‡qvM hš¿ e¨envi Kiv †h‡Z cv‡i|

5.6 Rjve×Zvq BDwiqv mvi c‡qv‡Mi weKí e¨e¯v Kx?

†h mKj Rwg‡Z cwZ ermi Pviv jvMv‡bi ci Rjve×Zvi `i‡b BDwiqv mvi Dcwi c‡qvMi m¤e nq bv, Zv‡Z Kw•ÿZ djb cvIqv hvq bv| †m Rb¨ bv‡Uv‡R‡bi Afve wgUv‡bvi Rb¨ Dcwic‡qv‡Mi weKí e¨e¯v wb‡Z n‡e|

e¨e¯vcbv

- Rjve×Zvi †¶‡Î ¸wU BDwiqv mvi c‡qvM KivB DËg| †m Rb¨ mwie×fv‡e Pviv †ivcY Ki‡Z n‡e
- mwi †_‡K mwi Ges †MvQv †_‡K †MvQvi `i‡Z 20 †mwg n‡Z n‡e
- AvDk Ges Avg‡b Pviv †ivc‡Yi 7-10 w`‡bi g‡a¨ cwZ Pvi †MvQvi gvSLv‡b 7-10 †mwg Kv`vi Mfx‡i ¸wU cÖZw`‡Z n‡e Ges †ev‡iv‡Z †ivc‡Yi 15-20 w`‡bi g‡a¨ ¸wU c‡qvM Ki‡Z n‡e
- mvavi YZ AvDk I Avgb av‡bi Rb¨ 1.8 Mvg mvB‡Ri GKwU ¸wU Ges †ev‡iv av‡bi Rb¨ eo mvB‡Ri (2.7 Mvg) GKwU ¸wU e¨envi Ki‡Z n‡e|

5.7 Rwg‡Z `wo‡bv cwb Ae¯vq BDwiqv Dcwi c‡qvM Kiv hv‡e Kx?

`wo‡bv cwb‡Z BDwiqv c‡qvM Ki‡j c_‡g mvi cwbi mv‡_ wg‡k ¶vixq `eY ‰Zwi K‡i hvnv A¨v‡gwbqv M¨vm AvKv‡i bvB‡Uv‡R‡bi AcPq evovq| ZvB `wo‡bv cwb‡Z BDwiqv mvi c‡qvM Kiv DwPZ bq|

e¨e¯vcbv

- Rwg‡Z wQcwQ‡c cwb‡Z BDwiqv mvi mgfv‡e wQUv‡bvi ci nwZ‡q ev wbowb h‡ši mvnv‡h¨ gwUi mv‡_ wgwk‡q w`‡j fvj djb Avkv Kiv hvq
- Rjve×Zvi Rb¨ cwb Kgv‡Z bv cvi‡j Rjve×Zvi Av‡M A_vr avb †ivc‡Yi ci †ev‡iv‡Z 15-20 w`b Ges AvDk I Avg‡b 7-10 w`‡bi g‡a¨B ¸wU BDwiqv mvi c‡qvM Kiv DwPZ|

5.8 me ivmvqwbK mvi GK mv‡_ wgwk‡q Rwg‡Z c‡qvM Kiv hv‡e wK?

cwZwU ivmvqwbK mvi wfbwfb Dcv`v‡b MwVZ| mvi¸‡jv GK‡Î wgkv‡j wb‡R‡`i g‡a¨ ivmvqwbK wewµqvi d‡j bZyb e¯‘wZwi nq, hvi †KvbwU Mv‡Qi Rb¨ ¶wZKi Avevi †KvbwU‡Z Mv‡Qi Lv`¨ cvY ej‡Z wKQyB _v‡K bv| ZvB, G m¤ú‡K bv †R‡b mKj ivmvqwbK mvi GK‡Î wgkv‡bv DwPZ bq|

wewfb mvi wgkv‡bv

e¨e¯vcbv

- BDwiqvi mv‡_ wUGmwc wgkv‡bv DwPZ bq
- BDwiqvi mv‡_ GgIwc wgkv‡bv hv‡e Z‡e wgkb 2-3 w`‡bi †ewk ivLv hv‡e bv
- `¯v mv‡ii mv‡_ wUGmwc mvi wgkv‡bv hv‡e bv
- ZvB SwK Gov‡bvi Rb¨ mKj ivmvqwbK mvi Avjv`v Avjv`v fv‡e Rwg‡Z c‡qvM Kiv DwPZ|

5.9 mvi c‡qv‡Mi mvkqx c×wZ ev LiP Kx fv‡e Kgv‡bv hvq?

fvj dj‡bi Rb¨ myg mvi e¨envi c‡qvRbxqZv m¤ú‡Ü AvR Avi †Kvb wØgZ †bB| myg mvi e¨envi †hgb djb e„× cvq, †ZgwbB mv‡ii LiP I K‡g| K‡qKwU mv‡ii cieZx dm‡j i Dci cfve _vKvq mvi c‡qvM GKK dmj wfwËK bv n‡q dmj Pµ wfwËK nIqv DwPZ| Zv‡Z K‡i mv‡ii mvk‡qi mv‡_ mv‡_ LiP I Kg†e|

e¨e¯vcbv

- †ev‡iv‡Z dm‡dU, cUvk, wRcmvg I `¯v mvi gvÎvbyqx e¨envi Ki‡j Avg‡b A_vr wØZxq dm‡j D‡jwLZ mvi¸‡jv A‡aK gvÎvB e¨envi Ki‡j B P‡j
- `¯v mvi GKevi c‡qvM Ki‡j Zv cieZx wZb dm‡j c‡qvM Ki‡Z n‡e bv
- ‰Re mvi, †hgb ‰aÂv ev Wvj RvZxq dmj, †Mvei ev cPv AveRbv e¨envi Ki‡j BDwiqv mv‡ii cwigvY kZKiv 30-50 fvM Kg c‡qvM Ki‡Z n‡e|

5.10 ‡e‡j gwU‡Z cUvk mvi Kx fv‡e c‡qvM Kiv DwPZ?

cUvk mvi av‡bi GKwU AwZ c‡qvRbxq Dcv`vb| cUwkqvg MvQ‡K k³ K‡i Ges †ivM cwZ‡iva ¶gZv evovq| cUwkqv‡gi Afv‡e Mv‡Qi evo-evowZ K‡g hvq| †e‡j gwU nvjKv eby‡Ui nIqvq cUwkqvg cwbi mv‡_ Pvqwb‡Pi ¯‡i ev Ab¨ Rwg‡Z P‡j hvq weavq `xN¯vqx nq bv|

e¨e¯vcbv

- ‡e‡j gwUi †¶‡G A‡aK mvi †kl Pv‡Ii mgq Ges ewK A‡aK m‡ev”P Kwgk Ae¯vq Dcwi c‡qvM Ki‡Z n‡e
- mvi c‡qv‡Mi ci gwUi mv‡_ fvj fv‡e wgwk‡q ‡`qv DwPZ|

nvm-gywMi weôv

5.11 ivmvqwbK mv‡ii weKí wn‡m‡e gywMi weôv e¨envi Kiv hv‡e Kx?

gywMi weôv dmdivm mv‡ii weKí wn‡m‡e e¨envi Kiv hvq| KviY G‡Z i‡q‡Q Mv‡Qi c‡qvRbxq wewfb Lv`¨ Dcv`vb| GQvov gywMi weôv Zzjbvgj‡K fv‡e m¯v|

e¨e¯vcbv

- Avgb †gŠmyg cwZ weNv Rwg‡Z 12 gY I †ev‡iv †gŠmyg 18 gY m‡ZR gywMi weôv (hvi g‡a¨ mvavi YZ 60-70 fvM cwb _v‡K) c‡qvM Ki‡j †Kvb ai‡bi ivmvqwbK mvi c‡qvM bv K‡i I Avkvby¸c djb cvIqv hvq
- av‡bi Rwg‡Z GK †gŠmyg Dchy³ cwigvY m‡ZR weôv c‡qvM K‡i cieZx `ÿU †gŠmyg Abyôgw`Z gvÎvq ïaybBDwiqv mvi c‡qv‡Mi gva¨‡g av‡bi fvj djb cvIqv hvq| G‡¶‡Î Ab¨ ivmvqwbK mv‡ii c‡qvRbxq nq bv
- weôv c‡qv‡Mi ci gwUi mv‡_ fvj K‡i wgwk‡q w`‡Z n‡e Ges 3-4 w`b ci Pviv †ivcY Ki‡Z n‡e
- Pviv †ivc‡Yi ci AšZ 14 w`b chš Rwg‡Z cwb a‡i ivL‡Z n‡e|

5.12. Rwg‡Z MÜK mv‡i i Afve Kx fv‡e eS‡v hv‡e Ges Zv‡Z Kx Kiv `iKvi?

MÜ‡Ki Afve n‡j c_‡g KwP cvZv njy`nq Ges Av‡¯ Av‡¯ cÖvi MvQ njy`n‡q hvq| BDwiqv mvi c‡qvM Kivi civl hw` avb MvQ nj‡` _v‡K Ges Mv‡Qi evo-evowZ Kg nq Z‡e eS‡Z n‡e Rwg‡Z MÜ‡Ki Afve n‡q‡Q| mvavi YZ †h mKj Rwg‡Z cwb R‡g_v‡K evmemgqwfRv_v‡K †mB mKj Rwg‡Z MÜ‡Ki Afve †`Lvw`‡Z cv‡i|

MÜ‡Ki AfveRwbZ jÿY

e¨e¯vcbv

- MÜ‡Ki Afve †`Lvw`‡j Zvr¶wbK fv‡e Rwgi cwb mwi‡qw`‡Z n‡e
- Gici weNv cwZ 8.0 †KwR wRcmvg mvi Dcwi c‡qvM Ki‡Z n‡e
- GK †gŠmy¨gwRcmvg mvi c‡qvM Ki‡j cieZx dm‡j mvavi YZ Avi c‡qvRb nq bv
- †h mKj Rwg‡Z MÜ‡Ki Afv‡ei ZxeZv i‡q‡Q †m mKj Rwg‡Z cwZevi avb Pv‡l wRcmvg mvi c‡qvM Ki‡Z n‡e|

5.13 av‡bi Rwg‡Z `¯vi Afv‡ei j¶Y Kx Ges Zv‡Z Kx Kiv `iKvi?

hw` avb MvQ gv‡S g‡a¨ Lv‡Uv n‡q hvq ev e‡m c‡o Ges cÖvZb cvZv gi‡P cov ev`wg t_‡K Kgjv i0 avi Y K‡i Ges av‡bi Kwk Kg nq ZLb eS‡Z n‡e Rwg‡Z `¯Zvi Afve N‡U‡Q| `¯Zvi Afve cKU n‡j KwP Pviv gviv hvq| mvavi YZ †h mKj Rwg‡Z cwb R‡g_v‡K †mB mKj Rwg‡Z `¯vi Afve †`Lvw`‡Z cv‡i|

`¯vi AfveRwbZ jÿY

e¨e¯vcbv

- Rwg‡Z `¯vi Afve ‡`Lvw`‡j c_‡g Rwg t_‡K cwb mwi‡qw`‡Z n‡e
- Gici weNv cwZ 1.5 †KwR wRsK mvj‡dU Dcwi c‡qvM Ki‡Z n‡e
- Rwg gv‡S g‡a¨ ïKv‡Z n‡e
- `¯vi Afv‡ei m¤¢ebv_vK‡j exRZjvq wRsK mvj‡dU c‡qvM Kiv †h‡Z cv‡i
- A_ev Pviv †ivc‡Yi c‡e `¯v mv‡ii `e‡Y Pvivi wkKo 5-7 wgwbU Wye‡q ivL‡Z n‡e| Gi Rb¨ 20-40 Mvg wRsK A·vBW cwZ GK wjUvi cwb‡Z e¨envi Ki‡Z n‡e|

5.14 avb Mv‡Q ‡jŠ‡ni AwaK¨RwbZ welwµqvi j¶Y Kx Kx Ges Gi cwZKvi Kx fv‡e Kiv hvq?

†jŠn Dcv`v‡bi Awa‡K¨i Rb¨ avb Mv‡Qi wb‡Pi cvZv A_vr cÖvZb cvZvi AvMvi w`‡K ev`wg njy‡` ev Kgjv †jeÿ i0 avi Y K‡i| welwµqv cKU n‡j cvZv ev`wg i‡Oi n‡q wb‡Pi cvZv g‡i hvq| Mv‡Qi evo-evowZ I Kwk Kg nq| welwµqvi d‡j Mv‡Qi wkKo Kg, †gvUv I Mvp ev`wg i0 Gi nq| A¤¢q gwU‡Z (jvj gwU) †ewk cwigv‡Y †jŠn Dcv`vb _vK‡j Gwelv³ Zvn‡Z cv‡i|

†ÿ‡Z cwb

e¨e¯vcbv

- Rwg‡Z cwb a‡i ivL‡Z n‡e|

5.15 BDwiqv mvi Kx fv‡e †Pbv hvq?

evRv‡i BDwiqv mv‡ii `vg Ab¨vb¨ mv‡ii †P‡q Kg| eZgv‡b †QvU mv`v `vbv Ges A‡c¶vKZ eo AvKwZi aea‡e mv`v `vbv`vi BDwiqv mvi evRviRvZ n‡"Q| mv‡ii e¨vcK Pwn`vi Kvi‡Y t`‡ki wewfb¯v‡b cvqB Amvaye¨emvqx‡` i KvQ t_‡K tfRvj mvi wK‡b KI‡Kiv cZwiZ nb| ZvB Avmj mv‡ii ˆewkó¨ m¯ú‡K Rvbv mK‡j i GKvš c‡qvRb|

c×wZmgn¨

- Avmj BDwiqv mvi †Kvb Ae¯v‡ZB ùwUK AvKwZi n‡e bv
- BDwiqv mvi cwb‡Z M‡j hvq
- G mvi wgkv‡bv cwb‡Z Zjwb c‡o bv Ges cvÎwU nvZw`‡q¯úk Ki‡j VvÛv Abyfe nq
- Gi `eY nvjKv †Nvjv‡U i0 avi Y K‡i
- ïK‡bv BDwiqvi `vbv nv‡Z GK gyWvwb‡q wKQy¶Y ivLvi ci nv‡Zi Zvjyi Z AvUv‡jv fve Abyfe nq|

5.16 wUGmwc mvi Kx fv‡e †Pbv hvq?

wUGmwc mvi mvavi YZ A¤¯v` Ges Sv‡Sv‡jv MÜhy³| GKgyWvwUGmwc mvi bv‡Ki Kv‡Q wb‡q kvm MnY Ki‡j Zxe Sv‡Sv‡jv MÜ jv‡M| wUGmwc mvi Lye k³, ZvB `yB Av½yj i b‡Li gv‡S ‡i‡L Pvc w`‡j mn‡R ¸‡ov n‡e bv| †fRvj mvi GKB fv‡e Pvc w`‡j ¸‡ov n‡q hv‡e Ges ¸‡ov bvbv i‡Oi n‡Z cv‡i|

c×wZmgn-

- GK PvgP wUGmwc mvi Avav Mvm cwb‡Z wgkv‡j `ex fz‡ n‡q cwi®vi `eY ˆZwi K‡i
- ‡fRvj wUGmwc mvi cwb‡Z ‡Nvjv `eY ˆZwi K‡i
- wUGmwc mvi cwb‡Z Mj‡Z GKUzmgq jv‡M, Z‡e m¤úŸi¦‡c M‡j hvq
- †fRvj wUGmwc mvi m¤úŸi¦‡c M‡j bv Ges Mv‡mi wb‡P Zjwb c‡o|

5.17 Gg lwc mvi ‡Pbvi Dcvq Kx?

evsjv‡`‡k cPwjZ cUvk mv‡ii g‡a¨ D‡jL‡hvM¨ n‡"Q wgDwi‡qU Ae cUvk ev Gg lwc mvi| Gg lwc mv‡i 50% cUwkqvg (K) we`¨gvb| ¯vbxq fv‡e wewfb cwµqvi gva¨‡g Gg lwc mvi †fRvj n‡q _v‡K| Gg lwc mv‡ii mv‡_ mv`vwgwn I †gvUv ewj jvj iO K‡i wgwk‡q †fRvj Gg lwc mvi ˆZwi Kiv n‡q _v‡K| ZvQvov Gg lwc mv‡ii mv‡_ AvswkK Kv‡Pi Mfxov wgwk‡q †fRvj mvi ˆZwi Kiv nq| KL‡bv KL‡bv mvgvb¨ cwigvY Gg lwc mv‡ii mv‡_ Lvevi jeY wgwk‡q jvj iO K‡i †fRvj Gg lwc mvi ‰Zwi K‡i evRvi RvZ Kiv nq|

c×wZmgn-

- Gg lwc mv‡ii iO mvavi YZ nvjKv ev Mvp jvj‡P n‡q _v‡K| G mvi †QvU †_‡K gvSwi ùwUK AvKwZi n‡q _v‡K| Gg lwc mv‡ii Sv8v‡jv MÜ ev¯v` †bB
- Avav Pv PvgP Avmj Gg lwc mvi Avav Mvm cwb‡Z wgkv‡j m¤úŸ`ex fz‡ n‡q cwi®vi `eY ˆZwi K‡i
- mv‡ii mv‡_ wKQyA`eYxq e¯ †hgb- ewj, Kv‡Pi Mfxov, wgwn mv`v cv_i, B‡Ui Mfxov BZ¨w` †gkv‡j Zv Zjwb AvKv‡i Mv‡mi wb‡P Rgv nq
- mv‡ii mv‡_ jvj ev Ab¨ †Kvb iO wgkv‡j cwbi iO †mB Abfxwqx n‡e Ges iO †f‡m DV‡e, GQvov nv‡Z I iO jv‡M
- mwVK Gg lwc mv‡ii iO KL‡bv nv‡Z jv‡M bv
- elvKv‡j Gg lwc mvi †Lvjv Ae¯vq †i‡L w`‡j evZvm †_‡K Av`Zv †kvlY K‡i wf‡R DV‡e Ges µgvš‡q mv‡ii bgfxwq Av`Zvi cwigvY e„× cv‡e|

6. ¸wU BDwiqv msµvš

¸wU BDwiqv (eo 2.7 Mvg)

¸wU BDwiqv (gvSvix 1.8 Mvg)

h‡ši gva¨‡g ¸wU BDwiqv c‡qvM

6.1 AWD c‡qvMKZ ‡mP Rwg‡Z ¸wU BDwiqv c‡qvM Kiv hv‡e wK?

AWD GKwU cwb mvkqx c×wZ hv‡Z memgq `wo‡bv cwb ivLv nq bv| Aci w`‡K ¸wU BDwiqv c‡qvMKZ Rwg‡Z cwb a‡i ivL‡Z nq|

e¨e¯vcbv

- ¸wU c‡qvMKZ Rwg‡Z AWD c×wZ‡Z †mP c‡qvM Kiv hv‡e| Z‡e Rwg memgq wfRv Ae¯vq ivL‡Z n‡e Ges j¶ ivL‡Z n‡e †hb ïwK‡q †d‡U bv hvq|

6.2 ‡e‡j gwU‡Z ¸wU BDwiqv c‡qvM Kiv hv‡e Kx?

¸wU BDwiqv c‡qvMKZ Rwg‡Z memgq wQcwQ‡c cwb a‡i ivL‡Z nq| AšZc‡¶ Rwg ïwK‡q bv dvUv ¸wU BDwiqv c‡qv‡Mi cekZ| Aciw`‡K †e‡j, †e‡j †`wAvk ev nvjKv gwUi ebfxUi Rwg‡Z `xN mgq cwb a‡i ivLv hvq bv| ZvQvov †ewk cwb c‡qvM Ki‡j ¸wUi bvB‡Uv‡Rb Pwµq wb‡Pi ¯‡i P‡j hvq| Avevi gwU †d‡U †M‡j bvB‡Uv‡Rb M¨vm wn‡m‡e evZv‡m P‡j hv‡e| ZvB †e‡j gwU‡Z ¸wU BDwiqv c‡qvM Kiv DwPZ bq|

e¨e¯vcbv

- ‡e‡j gwU‡Z Kw•ÿZ djb †c‡Z n‡j BDwiqv mvi AšZ 4 ev‡i c‡qvM Ki‡Z n‡e| †hgb 1/4 fvM †kl Pv‡li mgq, 1/4 fvM Pviv †ivc‡Yi 15-20 w`b ci, 1/4 fvM 35-40 w`b ci (Rv‡Zi RxebKv‡j i Dci wfwË K‡i) Ges Aewkó 1/4 fvM dzj Avmvi mgq Dcwi c‡qvM Ki‡Z n‡e
- mvi mg fv‡e wQUv‡bvi ci nvZ ev wbowb hš w`‡q gwUi mv‡_ fvj fv‡e wgwk‡q w`‡Z n‡e|

6.3 Avg‡b †Rvqvi-fvUv jeYv³ I AjeYv³ GjvKvq ¸wU BDwiqv c‡qvM Kiv h‡e Kx?

Avg‡b †Rvqvi-fvUv GjvKvq mgqgZ BDwiqv Dcwi c‡qvM Kiv hvq bv weavq Mv‡Qi evo-evowZ K‡g djb K‡g hvq| ZvB GgZve¯vq `vbv`vi BDwiqv mv‡i i weKí mvi e¨envi Kiv DwPZ|

e¨e¯vcbv

- `w¶YvÂ‡j i †Rvqvi-fvUv jeYv³ Ges AjeYv³ GjvKvq ¸wU BDwiqv e¨envi Kiv DËg
- †ivc‡Yi 7-10w`b ci ¸wU BDwiqv Rwg‡Z GKevi B c‡qvM Ki‡Z n†e
- ¸wU †_‡K memgq Mv‡Qi c‡qvRb Abyôvqx bvB‡Uv‡R‡bi mieivn _vKvq Mv‡Qi †Kvb mßg ¶avi_v‡K bv weavq djb ev‡o|

7. wjd Kvjvi PvU (Gjwmwm) msµvš

wjd Kvjvi PvU (Gjwmwm)

e¨envi c×wZ

Gjwmwmi gvb 3.0

7.1 Gjwmwmi gvb w`‡bi †Kvb mgq wbaviY Kiv DwPZ?

Gjwmwm e¨env‡i i gva¨‡g mwVK mg‡q mwVK cwigvY bvB‡Uv‡Rb mvi c‡qvM K‡i G mv‡i i KvhKwiZv evov‡bv hvq| Gjwmwmi msKU gv‡bi Dci wfwË K‡i bvB‡Uv‡R‡bi c‡qvRbxqZv wbYq Kiv nq| KwP cvZvi gv‡Si Ask Gjwmwmi Dc‡i †i‡L cvZvi i‡Oi mv‡_ Gjwmwmi iO m¶ fv‡e wgjv‡Z nq| Zv bv n‡j Gjwmwmi gvb fyj n‡Z cv‡i|

KiYxq

- Gjwmwmi mwVK gvb wbY‡qi Rb¨ w`‡bi AÜKvi vsk Ges †PvL SvSv‡jv cLi †iv‡`i mgq cwinvi Ki‡Z n‡e hv‡Z m‡hi Av‡jv cwZdwjZ n‡q gv‡c ZviZg¨ bv NUvq
- kix‡i i Qvqvq gvc wb‡Z n‡e hv‡Z m‡hi Av‡jv mivmwi cvZv wKsev Gjwmwmi Dci bv c‡o
- mvavi YZ mKvj 9-11Uv Ges weKvj 2-4Uvi g‡a¨ Gjwmwmi gvb ‡bqv m‡evËg|

8. av‡bi AvMvQv msµvš

av‡bi wewfb cKvi AvMvQv

DBWvi w`‡q `gb

AvMvQvbvkK c‡qvM

8.1 avb †¶‡Z AvMvQv I Gi `gb e¨e¯v Kx?

AvMvQv avb Mv‡Qi mv‡_ mv‡_ ew× cvq I avb Mv‡Qi mv‡_ Av‡jv, evZvm cwb I Lv‡`¨vcv`v‡bi Rb¨ cwZ‡hvwMZvq wjß nq| avb-AvMvQvi cwZ‡hvwMZvi d‡j †ivcv Avgb av‡bi djb kZKiv 20-30 fvM, †evbv AvDk av‡bi 30-99 fvM, †ivcv AvDk av‡bi 23-72 fvM Ges †ev‡iv av‡bi djb cvq 30-40 fvM K‡g †h‡Z cv‡i| avb AvMvQvi cwZ‡hvwMZvi µwšÍvK v‡j i (Critical time) c‡i AvMvQv `gb Ki‡j av‡bi djb ev‡o bv eis avb Drcv`b LiP †e‡o hvq| GgZve¯vq fv‡jv djb †c‡Z n‡j av‡bi Rwgi AvMvQv mwVK mg‡q `gb Ki‡Z n‡e| fv‡jv dj‡bi Rb¨ GKwU wbw`ó mgq chš Rwg Aek¨B AvMvQvgy³ ivL‡Z n‡e|

e¨e¯vcbv

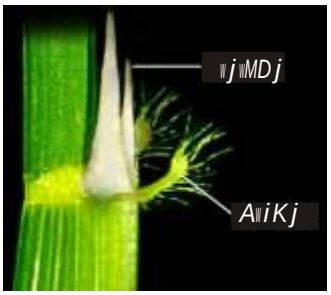
- KIKMY mvavi YZ wbowbi mvnv‡h¨ I nvZ w`‡q †U‡b AvMvQv `gb K‡i _v‡K
- AvMvQvbvkK e¨envi K‡i I AvMvQv `gb Kiv hvq
- ‡evbv AvD‡ki †¶‡Î avb †evbvi ci 40-45 w`b chš Rwg AvMvQvgy³ ivL‡Z n‡e
- †ivcv AvD‡ki †ejvq Pviv jvMv‡bvi ci 30-40 w`b chš AvMvQvgy³ ivL‡Z n‡e
- †ivcv Avg‡bi Rwg Pviv jvMv‡bvi ci †_‡K 30-40 w`b chš Aek¨B AvMvQv gy³ ivL‡Z n‡e
- †ev‡iv av‡bi Pviv jvMv‡bvi 40-50 w`b chš AvMvQv gy³ ivL‡j fv‡jv djb Avkv Kiv hvq
- jvBb K‡i †ivcY ev ecbKZ Rwg‡Z DBWvi w`‡q AwZ mn‡R AvMvQv `gb Kiv hvq
- GKRb kwgK DBWvi w`‡q N›Uvq 10-15 kZvsk Rwgi AvMvQv `gb Ki‡Z cv‡i
- †ivcY `i‡Z 20×20, 25×20 ev 25×25 †mw›UwgUvi n‡j DBWvi mn‡R e¨envi Kiv hvq
- AvMvQvbvkK e¨env‡i Kg Li‡P AvMvQv `gb Kiv hvq
- eZgv‡b e¨eüZ AvMvQvbvkK‡i g‡a¨- wiwdU, GUvK, wi‡gvfvi, †jevi, mgvcvwKb, wbgvb, wbowb, †iBb, Ai‡bU, g¨v‡PwU, Uc÷vi, †mUAd, Gg‡Kvi, Ggwmwcg, wmwiqvm cfwZ D‡jL‡hvM¨
- G¸wj Zij, `vbv`vi I cvDWvi AvKv‡i cv Iqv hvq
- AvMvQvbvk‡Ki e¨env‡ii Av‡M †evZj ev c¨v‡K‡Ui Mv‡q †jLv gvÎv, mgq Ges mZKZv fvj fv‡e ejyS e¨envi Ki‡Z n‡e
- AvMvQvbvkK c‡qv‡Mi c‡i I ‡Kvb †Kvb mgq GKevi nvZ wbowbi c‡qvRb n‡Z cv‡i |

8.2 k¨vgv Nv‡mi Pviv Kxfv‡e †Pbv hvq?

k¨vgvi Pviv av‡bi Pvivi g‡Zv †`Lvq| mn‡R G‡`i c„K Kiv hvq bv wea‡q KI‡Kiv av‡bi Pviv g‡b K‡i k¨vgvi Pviv Rwg‡Z †i‡L †`q| mvavi YZ ex‡Ri gva¨‡g GwU esk we¯vi K‡i| DPyGes wbPy`ªai‡bi av‡bi Rwg‡Z G AvMvQv cPy cwigv‡Y †`Lv hvq| Giv av‡bi mv‡_ bvB‡Uv‡Rb, cUwkqvg I dmdiv‡mi Rb¨ Zxe cwZ‡hvwMZv K‡i| G Kvi‡Y kZKiv 90 fvM chš dmj bó n‡q †h‡Z cv‡i| GwU cwi_exi me‡P‡q ¶wZKviK AvMvQv¸‡jvi Ab¨Zg| ZvB Pviv Ae¯vq GwU `g‡bi Rb¨ †Pbvi Dcvq Rvbv we‡kl c‡qvRb|

cwZmgn

- k¨vgvi cvZv gmwY I Mvo meyR, †`L‡Z avb Mv‡Qi cvZvi g‡Zv| cvZvi †Lvj wKQyUv †jvghy³ I Kv‡Ûi mv‡_ wXjvfv‡e hy³ _v‡K
- Pviv Ae¯vq avb I k¨vgvi ewnivaq‡ei g‡a¨ mv`k¨ GZ †ewk †h G‡`i‡K mbv³ Kiv KóKi, mvavi YZ av‡bi Pvivq cvZvi †Mvovq wjwMDj I AwiKj _v‡K hv k¨vgv Nv‡mi Pvivq _v‡K bv
- GKgvÎ wjwMDj I AwiK‡j i gva¨‡g k¨vgvi Pviv av‡bi Pviv †_‡K c„K Kiv hvq|



9. av‡bi †cvKv msµvš

wewfb cKvi gvRiv †cvKv

ev`vgx MvQdwos

cvgwi †cvKv

9.1 gvRiv †cvKv Kxfv‡e av‡bi ¶wZ K‡i Ges Gi cwZKv‡ii Dcvq Kx?

gvRiv †cvKvi Kxov¸‡jv Kv‡Ûi †fZ‡i †Xv‡K Lvlqv ïi“ K‡i Ges eabkxj chv‡q ax‡i ax‡i Mv‡Qi wWM cvZvi †Mvov †L‡q ‡K‡U †d‡j| d‡j wWM cvZv gviv hvq Ges G‡K giwWM e‡j| KvBP‡_vo Avmvi ci gvRiv †cvKv ¶wZ Ki‡j m¤úv¯wkl ïwK‡q hvq Ges G‡K mv`wkl e‡j|

mv`wkl

e¨e¯vcbv

- gvRivi wW‡gi Mv`v msMn K‡i bó K‡i †djyb
- Av‡jvK dvu`i mvnv‡h¨ †cvKvi g_ msMn K‡i `gb Ki“b
- Rwg‡Z kZKiv 10-15 fvM giwWM A_ev kZKiv 5 fvM mv`wkl †`Lv w`‡j Abygw`Z KxUbvkK mwVK gvGvq c‡qvM Ki“b
- Avµvš avb KvUvi ci Pvl w`‡q bvov gwU‡Z wgwk‡q ev cyo‡q †djyb|

†cvKvµvš KvÐ

9.2 ev`vwg MvQdwos (BPH) `g‡bi Dcvqmgn-Kx?

ev`vwg MvQdwos-Gi cY-eq® †cvKv I ev"Pv avb Mv‡Qi †Mvovq e‡m im ï‡l Lvq | d‡j MvQ c‡yo hvIqvi gZ iO aviY K‡i g‡i hvq, G‡K ncvi evY e‡j | Avenv Iqv †cvKvi Ab¥K‡j _vK‡j ˆPÎ Ges Avwk‡bi gvSv-gvwS (gvP Ges †m‡Þ¤‡ii †kl mßv‡n) ncvi evY †`Lv w`‡Z cv‡i | †Kvb ‡Kvb GjvKvq GwU Kv‡i›U †cvKv bv‡g I cwiwPZ |

e¨e¯vcbv

- †ev‡iv †gŠm‡yg gv‡Ni (†deæqvwii c_g mßvn) Ges Avgb †gŠm‡yg kve‡Yi gvSvgvwS (AvM‡ói c_g mßvn) †_‡K wbqwgZ Mv‡Qi †Mvov ch‡e¶Y Kiæb
- Av‡jvK du‡`i mvnv‡h¨ †cvKvi Dcw¯wZ mbv³ K‡i `gb e¨e¯v wbb
- AvµgY ceY GjvKvq av‡bi Pviv 20×20 ev 25×15 †mw›UwgUvi `i-‡Z †ivcY Kiæb
- †cvKv †`Lv gvÎ Rwg †_‡K cvwb mwi‡q ïwK‡q †djy
- wZb mvwi ci ci `ÿ¨mvwii MvQ †n‡j w`‡q Av‡jv-evZvm c‡e‡ki e¨e¯v Kiæb
- kZKiv 50 fvM Mv‡Q 2-4wU M feZx ev 10-15wU ev"Pv †cvKv †`Lv w`‡j KxUbvkK e¨envi Kiæb | KxUbvkK Aek¨B Mv‡Qi †Mvovq c‡qvM Ki‡Z n‡e |

Avµvš avbMvQ

9.3 meyR cvZvdwos (GLH) Kx fv‡e `gb Kiv hvq?

meyR cvZvdwos av‡bi cvZvi im ï‡l Lvq | d‡j Mv‡Qi ey,× K‡g hvq Ges MvQ Lv‡Uv n‡q hvq | G †cvKv Uy‡iv fvBivm †ivM Qwo‡q me‡P‡q †ewk ¶wZ K‡i |

meyR cvZvdwos

e¨e¯vcbv

- Av‡jvK du‡`i mvnv‡h¨ †cvKv `gb Kiæb
- nvZRv‡ji cwZ Uv‡b hw` GKwU meyR cvZvdwos cvIqv hvq Ges
- Av‡kcv‡k Uy‡iv †ivMvµvš avb MvQ _v‡K, Zvn‡j exRZjvq ev Rwg‡Z Dchy³ KxUbvkK e¨envi Kiæb |

10. Bùy msµvš

gv‡Vi Kv‡jv eo Bùy

Bùyi ev"Pv

†Mv‡Q Bùy

10.1 Bùyi AvµgY †_‡K gv‡Vi avb Kx fv‡e i¶v Kiv hvq?

Bùy avb Mv‡Qi Kvzk ‡ZiPv (45° †Kvb) K‡i †K‡U †`q | mvaviYZ Nb AÜKviv"Qb av‡bi Rwg‡Z Bùyi AvµgY †ewk nq | Giv elvKv‡j mvZui †K‡U Rwj Avgb av‡bi MvQ †K‡U evmv evbvq | avb cvK‡j av‡bi Qov †K‡U gwUi wb‡P my½ K‡i Rgv K‡i iv‡L |

Bùy Øviv ‡ZiPvKZ.KvUv

Dcvqmgn-

- Rwgi AvBj wPKb (15-20 †mwg) ivL‡Z n‡e
- avb †ivc‡Yi mgq I †ivc‡Yi 45-50 w`‡bi g‡a¨ av‡bi Rwg I Avkcv‡ki GjvKvi Bùy `g‡bi e¨e¯v wb‡Z n‡e
- †h mg¯ du‡` Bùy aiv covi ci I Rxeš _v‡K, Ggb du e¨envi K‡i Bùy `gb Kiæb
- Bùy `g‡bi Rb¨ Zvr¶wbK wµqvkxj wel‡Uvc, †hgb Mg wgwkZ wRsK dmdvBW A_ev wej‡¤ wµqvkxj wel‡Uvc †hgb j¨vwb‡iU, Kv‡iU w`‡q Bùy `gb Kiæb
- Bùyi bZb M‡Z welv³ A¨vjy gwbqvg dmdvBW ewo †hgb A¨v‡jvdm ev KZBKdm w`‡q M‡Zi gy fvj K‡i eÜ K‡i w`‡j Bùy gviv hvq | G Rb¨ bZb M‡Z M¨vm ewo w`‡q Avkcv‡ki mKj M‡Zi ev bvjvi gy gwU w`‡q eÜ K‡i w`‡Z n‡e | M¨vm ewo mveavbZvi mv‡_ e¨envi Ki‡Z n‡e

11. KxUbvkK msµvš

KxUbvkK c‡qvM

11.1 mwVK gv Îvq KxUbvkK e¨envi i c‡qvRbxqZv †Kb?

wbweo Pv Ivev‡` i Kvi‡Y †cvKvgvK‡oi cv` ÿve I Avµg Y †e‡oB P‡j ‡Q| G chš evsjv‡` ‡k av‡bi 266wU ¶wZKvi K †cvKv mbv³ Kiv n‡q‡Q| Zv‡` i g‡a¨ 30wU av‡bi †ewk ¶wZ K‡i | cavb ¶wZKvi K †cvKvi Avµg‡Y †ev‡iv, AvDk I Avgb †gŠmÿg h_vµ‡g kZKiv cvq 13, 24 I 18 fvM djb bó bq| ZvB mwVK KxUbvkK, mwVK gv Îvq, mwVK mg‡q c‡qvM K‡i †cvKv `gb Kiv AZ¨vš Ri“wi |

e¨e¯vcbv

- mwVK KxUbvkK, mwVK gv Îvq c‡qvM bv Ki‡j jv‡f i †P‡q ¶wZi cwigvY †e‡o hvq| d‡j †cvKvi †etP _vKvi ¶gZv †e‡o hvq Ges G‡` i msL¨v e„× †c‡q Avµg‡Yi ZxeZv ev‡o
- Acic‡¶, AwaK gv Îvq KxUbvkK e¨envi Mv‡Q wel wµqv n‡Z cv‡i | Bnvi j ¶Y bvbv fv‡e cKvk cvq, †hgb Mv‡Qi evo-evowZ K‡g hvq, cvZv cÖo hvq GgbwK MvQ g‡i I †h‡Z cv‡i | AZGe, mwVK gv Îvq, mwVK KxUbvkK, mwVK mg‡q e¨envi i gva¨‡g †cvKv `gb K‡i dmj i ¶v Ki‡Z n‡e |

11.2 ‡¶‡Z †cvKv †` Lv gvGB KxUbvkK c‡qvM Kiv hv‡e Kx ?

Rwg‡Z av‡bi ¶wZi gv Îv mvavi YZ †cvKvi cRwZ, †cvKvi msL¨v, Dc`¨vZ G jvKvi mvgwMK cwi‡ek, Dc`¨vZ †¶‡Zi ev Zvi Av‡kcv‡ki Ae¯v, av‡bi RvZ, avb Mv‡Qi eqm, DcKvix ci‡fvRx I ciRxex †cvKvgvK‡oi msL¨v BZ¨vw` i Dci wbfi K‡i | Dc‡iv³ wel q¸‡jv we‡ePbvq G‡b Z‡eB KxUbvkK c‡qv‡M i wm×vš wb‡Z n‡e |

e¨e¯vcbv

- †cvKvi Avµg‡Yi gvGv Aw_K ¶wZi Øvi cv‡š †cŠQwi c‡eB ïaygKxUbvkK c‡qvM Ki‡Z n‡e
- Zv bv n‡j KxUbvkK c‡qv‡M jv‡f i †P‡q ¶wZi cwigvY †e‡o hv‡e |

11.3 KxUbvkK e¨envi bv K‡i Kx fv‡e †cvKvgvKo `gb Kiv hvq?

evsjv‡` ‡k G chš 266wU †cvKv av‡bi ¶wZ K‡i _v‡K| Gi g‡a¨ cvq 30wU †cvKv av‡bi †ewk ¶wZ K‡i | †cvKvi msL¨v, avb Mv‡Qi Rxeb¯i I Avenv Iqv †f‡` cwZwU †cvKvi gvi vZ‡K ¶wZ Kivi ¶gZv i‡q‡Q| ¶wZi cwigvY †e‡o †M‡j Pwl iv AcwiKwíZ fv‡e KxUbvkK c‡qvM K‡i _v‡K| G‡Z jv‡f i †P‡q ¶wZi cwigvY †e‡o hvq| wewfb ci x¶v wbix¶vq †` Lv †M‡Q mgwbZ ev jvB e¨e¯vcbv Pv Ivev‡` i c_g †_‡K gvbv n‡j †Kvb KxUbvkK e¨envi i c‡qvRb nq bv| Z‡e Avµg‡Yi gv Îv hw` KL‡bv wbqš‡Yi evB‡i P‡j hvq ïaygv Î ZLbB mwVK KxUbvkK, mwVK gv Îvq, mwVK fv‡e Ges mwVK mg‡q c‡qvM Ki‡Z n‡e |

mgwbZ ev jvB e¨e¯vcbvi Dcv`vbmgn-

- mnbkxj Rv‡Zi Pv I K‡i
- we avb27 cvgwi †cvKvi Avµg‡Yi cwZ ga¨g mnbkxj | weAvi11 Ges weAvi22 gvRiv †cvKvi AvµgY mnbkxj | Gme Rv‡Zi Pv I K‡i cv_wgK fv‡e Gme †cvKvi AvµgY cwZnZ Kiv hvq
- AvaywbK Pv Ivev` c×wZ Abymi Y K‡i
  - †¶‡Z cvZvgwQ, Pvl½ †cvKv I ev`vwg MvQdwos Gi AvµgY †` Lv †M‡j †¶Z †_‡K `¨vZ cwib ïwK‡q 3-4w` b ci Avevi †mP w` ‡Z n‡e
  - ev`vwg MvQdwos I cvgwi †cvKvi AvµgY †` Lv †M‡j BDwiqv mvi Dcwi c‡qvM eÜ ivL‡Z n‡e
  - QvZiv †cvKv, gvRiv †cvKv BZ¨vw` †cvKvi AvµgY †` Lv †M‡j nvZ w` ‡q Zyj aŸsk K‡i AvµgY Kgv‡bv hvq
  - ZvovZwo cv‡K Ggb AvMvg Rv‡Zi Pv I K‡i †cvKvi AvµgY cwinvi Kiv hvq
  - mwi I mwVK `i‡Z †ivcY K‡i †cvKvi AvµgY Kgv‡bv hvq
  - †¶‡Z cwib w` ‡q †j `v †cvKv `gb Kiv hvq
  - ‡¶Z AvMvQv gy³ K‡i †cvKvi AvµgY Kgv‡bv hvq |

- hwšK `gb e¨e¯vcbv
  - Av‡jvK dù e¨envi K‡i
  - nvZ Rv‡j i mvnv‡h¨ †cvKv a‡i gviv
  - Wvj cvjv cÖZ cwL emvi e¨e¯v K‡i
  - av‡bi cvZvi AvMv †K‡U cvgwi †cvKvi wWg I ev”Pv bó K‡i |
- DcKvix †cvKvgvKo I cvYx msi ¶Y K‡i
  AZGe, Dc‡iv³ c×wZ‡Z avb Pvl K‡i KxUbvkK e¨envi bv K‡iB av‡bi ¶wZKi †cvKvgvKo `gb Kiv hvq |

nvZ Rvj

11.4 ïK‡bv Rwg‡Z `vbv`vi KxUbvkK c‡qvM Kiv hvq bv †Kb?

`vbv`vi KxUbvkK Rwg‡Z c‡qvM Kiv mnR | Gi Rb¨ †hgb †Kvb hšcwZi `iKvi nq bv, †Zgb c‡qvRb nq bv ce-AwfÁZvi | `vbvi KxUbvkK mvavi YZ wmm‡UwgK RvZxq weI | ZvB Rwg‡Z c‡qv‡Mi ci cwbi mvnv‡h¨ wkK‡oi gva¨‡g MvQ Zv MnY K‡i mKj A½cZ‡½ †cÖQ †`q | ZvB `vbv`vi KxUbvk‡Ki †¶‡Î Rwg‡Z wQcwQ‡c cwb ivLv h‡_ó ¸i“ZcY¨ |

e¨e¯vcbv

- `vbv`vi KxUbvkK e¨env‡ii †¶‡Î Rwg‡Z 2-4 †mwg cwb 5-7 w`b a‡i ivL‡Z n‡e
- cwb Qvov `vbv`vi KxUbvk‡Ki mwµq Dcv`vb Mv‡Qi MnY Dc‡hvMx nq bv Ges wkKo Zv MnY K‡i wewfb A½cZ‡½ †cÖQ w`‡Z cv‡i bv
- AZGe, ïK‡bv Rwg‡Z `vbv`vi KxUbvkK c‡qvM Kiv DwPZ bq |

11.5 av‡bi dÞ‡dvUv Ae¯vq (Flowering stage) KxUbvkK c‡qvM Kiv hv‡e Kx ?

fvj Avenv I qvq mKvj 9Uv †_‡K `yó 1Uv chš AwaK msL¨K av‡bi dÞ‡ †dv‡U Ges civMvqY m¤úb n‡q _v‡K | G Ae¯vq wel‡v³ KxUbvkK dÞ‡ji Mv‡q jvM‡j avb wPUv n‡q hvq Ges wPUvi cwigvY AwZwi³ †e‡o hv I qvi m¤vebv_v‡K |

av‡bi dÞ †dvUv Ae¯v

Kiv Yxq

- dÞ‡dvUv Ae¯vq KxUbvkK c‡qvM Kiv hv‡e bv
- we‡kl c‡qvR‡b weKvj †ejvq KxUbvkK c‡qvM Kiv ‡h‡Z cv‡i KviY ZLb dÞ‡ †dvUv eÜ_v‡K |

11.6 KxUbvkK e¨env‡i Kx Kx mZKZv Aej¤b Kiv `iKvi?

me KxUbvkKB gvivZK wel | c‡qvR‡bi AwZwi³ KxUbvkK c‡qvM wec` †W‡K Avb‡Z cv‡i | KxUbvkK e¨env‡ii Av‡M Zvi mwVK bvg I c‡qvMwea m¤ú‡K †evZj ev c¨v‡K‡Ui Mv‡q †jLv fvj fv‡e †`‡L wb‡Z n‡e | wQwc ev c¨v‡KU †Lvjv ev †gqv`DËxY †Kvb KxUbvkK c‡qvM Kiv hv‡e bv | KxUbvkK c‡qv‡Mi mgq mZKZv Aej¤b Kiv c‡qvRb |

mZKZvmgn-

- Lwj Mv‡q ev Lwj †c‡U KxUbvkK c‡qvM Kiv DwPZ bq | wbtkv‡mi mv‡_I KxUbvkK †c‡Ui wfZi †h‡Z cv‡i
- KxUbvkK †hb Mv‡qi ZK ev †Pv‡L bv jv‡M | KxUbvkK Mv‡q jvM‡j mv‡_ mv‡_ †ewk cwb w`‡q aÞyq †dj‡Z n‡e
- evZvm †hw`K ‡_‡K eB‡Q †mw`‡K wcV w`‡q †¶‡Z KxUbvkK c‡qvM Ki‡j wQUv‡bv KxUbvkK Mv‡q jvM‡e bv
- KxUbvkK c‡qv‡Mi hšÍU cÖKvi, b`x ev Lvj-we‡j ‡aŠZ Kiv DwPZ bq | G‡Z cwb `vwZ n‡q gv‡Qi ¶wZ n‡Z cv‡i | G Rb¨ cÖKvi ev Ab¨vb¨ Drm †_‡K cwb Zzj G‡b wbivc` RvqMvq aÞyZ n‡e |

11.7 KxUbvk‡K Avµvš e¨w³ i Kx Kiv DwPZ?

KxUbvk‡Ki cKvi†f‡` i Dci ¶wZi cwigvY wbfi K‡i | GgbwK †Kvb †Kvb †¶‡G †ivMx gviv I †h‡Z cv‡i | ZvB mveavbZv Aej¤b Kiv AwZe Ri¤wi |

Kiv Yxq

- KxUbvk‡Ki wel wµqvq Avµvš n‡j hZ ZvovZwo m¤e wPwKrm‡Ki kiYvcb n‡Z n‡e, wPwKrm‡Ki Kv‡Q †b I qvi c‡e Avµvš e¨w³‡K axi¯'i fv‡e m¤úY¨ wekvgve¯vq ivLby
- KxUbvk‡K `vwZ Kvco‡Pvco Lyj ‡djby Ges Avµvš e¨w³‡K wX‡j Xvjv †cv I v‡K AveZ Ki¤b | †ivMx‡K GKcv‡k KvZ K‡i ïB‡q ivLby | VvÛvq Kvcyb †`Lv w`‡j K¤j w`‡q kixi Rwo‡q w`b
- KxUbvkK wM‡j †dj‡j †ivMx‡K ewg Kiv‡bvi †Póv Ki¤b | AÁvb Ae¯vq ewg Kivevi †Póv Ki‡eb bv |

‡h KxUbvk‡K †ivMx Avµvš n‡q‡Q †m †evZj Ges †evZ‡j i †j‡ej wPwKrmK‡K †`Lv‡Z n‡e | KviY †Kvb ai‡bi KxUbvk‡K wel wµqv n‡q‡Q Zv Rvbv wPwKrm‡Ki Rb¨ AZ¨vš Ri¤wi |

12. av‡bi †ivM msµvš

cvZv‡cvov †ivM

†Lvj‡cvov †ivM

ev÷ †ivM

evKwb †ivM

Uz‡iv †ivM

12.1 cvZv‡cvov †iv‡Mi j ¶Y I `gb e¨e¯v Kx?

cvZv‡cvov GKwU e¨vK‡Uwi qvRwbZ †ivM| eq¯‹ Mv‡Q †_vo Ae¯v †_‡K cvZv‡cvov †iv‡Mi j ¶Y †`Lv ‡`q| c_‡g cvZvi AMfvM †_‡K wKbviv eivei njy`i0 avi Y K‡i| c‡i cvZvUv ïK‡bv L‡oi i0 n‡q Av‡¯ Av‡¯ m¤úª cvZvUv g‡i ïwK‡q hvq| cvZvq †cvKvi Avµg‡Y I cvZvq cvZvq NI‡Yi d‡j mó ¶Z w`‡q Gi RxevYycvZvi †fZ‡i X‡K c‡o| AbeiZ e‡ó I S‡ov nv I qv G †ivM we¯v‡i mnvqZv K‡i|

cwZKvi

- mybg gvÎvq mvi e¨envi Ki‡b
- So e‡ó Ges †ivM †`Lv †` Iqvi ci BDwiqv mv‡i i Dcwi c‡qvM mvgwqK eÜ ivLyb
- †ivMvµvš Rwgi dmj KvUvi ci bvov cy‡o‡q †djyb|

12.2 ev÷ †iv‡Mi j ¶Y I cwZKv‡i i Dcvq Kx?

ev÷ GKwU QÎvKRwbZ †ivM| G †ivM cvZvq n‡j cvZv ev÷, wM‡U n‡j wMU ev÷ Ges wk‡I n‡j wkI ev÷ e‡j| c_‡g †QvU †QvU wW¤evKwZi `vM m‡ó nq| Av‡¯ Av‡¯ `vM e‡× cvq Ges `ßi cvš j¤v n‡q †Pv‡Li AvKwZ. avi Y K‡i| `v‡Mi Pvi av‡i ev`wg I gv‡Si Ask mv`v QvB eY nq| A‡bK¸‡jv `vM GK‡Î wg‡k c‡i v cvZv g‡i hvq| G †iv‡Mi Kvi‡Y Rwgi mg¯ avb bó n‡q th‡Z cv‡i|

cwZKvi

- mybg gvÎvq mvi e¨envi Ki‡b
- Rwg‡Z ‰Re mvi c‡qvM Ki‡b
- †ivM †`Lv gvÎ Rwg‡Z cwb a‡i ivLyb
- Avµvš Rwg‡Z BDwiqv Dcwi c‡qvM eÜ ivLyb
- cwZ weNvq 53 Mvg Uycvi, wRj ev †bwU‡ fv 7 w`b e¨eav‡b `ÿevi c‡qvM Ki‡b
- †ivMgy³ Rwg †_‡K exR msMn Ki‡b
- wkI ev÷ †`Lv gvÎB Dc‡i D‡jwLZ QGvKbvkK c‡qvM Ki‡Z n‡e|

12.3 †Lvj‡cvov †iv‡Mi j ¶Y Kx Ges Kx fv‡e `gb Kiv hvq?

†Lvj‡cvov GKwU QÎvKRwbZ †ivM| Kvzk MRv‡bvi mgq †_‡K †ivMwU †`Lv ‡`q| c_‡g †Lv‡j avyi i‡0i Rjv‡ci g‡Zv `vM c‡o Ges `vM¸‡jv j¤v-jw¤ fv‡e ev‡o Ges gvSLv‡b avyi n‡q ev`wg `vM Øviv AveË_v‡K| `vM¸‡jv Av‡¯ Av‡¯ eo n‡q mg¯ †Lv‡j I cvZvq A‡bKUv †MvL‡iv mv‡ci Pvgovi g‡Zv `vM †`Lv ‡`q| Mig I Av` Avenv I qvq †ivMwU †ewk nq| ZvQvov †ewk gvÎvq BDwiqv mvi e¨envi I Nb K‡i Pviv †ivcY G †ivM we¯v‡i mnvqZv K‡i| †ivMwU †Kvb †Kvb GjvKvq cÖwb ‡ivM bv‡g I cwiwPZ|

cwZKvi

- †ivM †`Lv w`‡j Rwgi cwb ïwK‡q †djyb
- Rwg‡Z mybg gvÎvq mvi e¨envi Ki‡b
- Lv‡Uv Rv‡Zi cwie‡Z j¤v Rv‡Zi avb Pv I Ki‡b
- †ivMvµvš Rwgi avb KvUvi ci bvov cy‡o‡q †djyb
- †kI gB †`qvi ci cwb‡Z fvmgvb AveRbv PU ev Kvco w`‡q †U‡b AvB‡j Zyj †djyb
- †iv‡Mi j ¶Y †`Lvgvî cwZ weNvq 67 wgwj dwjKz, K›Uvd ev ‡bwU‡ fv A_ev 133 wgwj ‡n · v‡KvbvRj c‡qvM Ki‡b|

ïKbv Rwg

Rwgi bvov cy‡o‡bv

12.4. evKvwb †iv‡Mi j ¶Y Ges `gb e¨e¯v Kx?

evKvwb QÎvKRwbZ †ivM | Avµvš Kvzk `æZ †e‡o Ab¨ Mv‡Qi Zvjbvq j¤v I wjKwj‡K n‡q hvq Ges nvjKv meyR i‡Oi nq | Mv‡Qi †Mvovi w`‡K cvwbi Dc‡ii wMUv†_‡K wkKo †ei nq | KLbI KLbI Avµvš Mv‡Qi †Mvov c‡P hvq | ax‡i ax‡i Avµvš MvQ g‡i hvq |

cwZKvi

- †ivMvµvš Kvzk Zvjj †djbv
- G †ivM exRevwnZ | ZvB exR †kvab Ki‡Z cvi‡j fvj nq | G Rb¨ Kv‡eÛvwRg Mæ‡ci †h †Kvb QÎvKbvkK‡i wZb Mvg GK wjUvi cvwb‡Z wgwk‡q GK †KwR exR mvivivZ wfwR‡q ivL‡j exR †kvab n‡q hv‡e
- ZvQvov GKB cwigvY QGvKbvkK w`‡q mvivivZ Pviv †kvab K‡i I fvj dj cvIqv hvq |

12.5 exRevwnZ QÎvK †ivM †_‡K Kx fv‡e dmj i ¶v Kiv hvq?

exR †kva‡bi gva¨‡g dmj‡K exRevwnZ QÎvK †ivM †_‡K i ¶v Kiv hvq | avb Pv‡li wZb †gŠmvjgB exR †kvab Kiv DwPZ | Z‡e evQvBKZ exR `vMgy³ I cwicvjn‡j mvaviYZ †kvab bv Ki‡j I P‡j |

cwZKvi

- evQvBKZ exR Kvco ev P‡Ui e¨v‡M f‡i wXjv K‡i †eta wbb
- cwZ †KwR ex‡Ri Rb¨ GK wjUvi cvwb†Z wZb Mvg e¨wfw÷b/‡bvBb/B fvwRg/Ucwmj cvm/ ‡nWvwRg/mvbdv‡bU G¸‡jvi †h †Kvb GKwU wgwk‡q wbb
- ex‡Ri †cvUjvwU/_‡j 12 N›Uv wgwkZ cvwb‡Z wfRv‡bvi ci cbvivq cwi®vi cvwb‡Z fvj fv‡e avjq wbb
- ex‡Ri †cvUjvwU cvwb †_‡K Zvjj BU ev Kv‡Vi Dci N›UvLv‡bK †i‡L cvwb Siv‡Z n‡e |

12.6 Usv‡iv †iv‡Mi j ¶Y I cwZKv‡ii Dcvq Kx?

Usv‡iv GKwU fvBivmRwbZ †ivM | GwU meyR cvZvdwos Øviv msµvwgZ nq | Pviv Ae¯nv †_‡K dzj †dvUv chš mg‡qi g‡a¨ G †ivM †`Lv w`‡Z cv‡i | KwP cvZvq wkiv eivei j¤vjw¤ chvqµ‡g nvjKv meyR I nvjKv nj‡` †iLv †`Lv ‡`q | c‡i mg¯ cvZvi Dci w`K Kgjv i‡Oi nq Ges Avµvš cvZv GKUvgyP‡o hvq | Mv‡Qi evo-evowZ I Kvzk K‡g hvq | d‡j Avµvš MvQ mv¯ Mv‡Qi Zvjbvq Lv‡Uv nq | Avµvš Mv†Qi wkKo `e-j n‡q hvq Ges Uvb w`‡j mn‡RB D‡V Av‡m |

cwZKvi

- Av‡jvK dvù e¨envi K‡i ‡iv‡Mi evnK meyR cvZvdwos †g‡i †djbv
- †iv‡Mi cv_wgK Ae¯vq †ivMvµvš MvQ Zvjj gwU‡Z cvjZ †djbv
- meyR cvZvdwos `g‡b wbavwiZ KxUbvkK c‡qvM Kiæb {cwZ weNvq 133 wgwj g¨vjvw_qb (57 Zij), †dwb‡Uvw_qb (50 Zij), dRv‡jvb (35 Zij) ev 150 wgwj WvB‡g‡_v‡qU (40 Zij), di‡gvw_qb (25 Zij) A_ev 226 Mvg Kviewwij (85 cvDWvi)} |

13. †mP msµvš

Mfxi bjKv

AMfxi bjKv

AvBj e¨e¯vcbv

13.1 fMf¯'cwbi¯‡ii ¶wZ bv K‡i Kx fv‡e av‡bi Pvl Kiv hvq?

avb Pv‡l Ab¨vb¨ dmj t_‡K †ewk cwbi c‡qvRb nq| GK †KwR avb Drcv`‡b 2500-4000 wjUvi cwb jv‡M| wewfb Kvi‡Y ï® tgŠmyg †ev‡iv‡Z av‡bi djb †ewk nIqvq cwb mvkqx Ab¨vb¨ dm‡ji Avev` bv K‡i avb Pvl †ewk Ki‡Q| G‡Z f-Ðci¯ cwb e¨envi Kiv nq †m‡Pi AvIZvaxb Rwgi gvÎ 21%, Avi fMf¯ cwb e¨envi Kiv nq ewK 79%| Gi g‡a¨ Mfxi bjKv w`‡q 15% Rwg‡Z †mP t`qv nq| cvq 64% Rwg‡Z †mP t`qv nq AMfxi bjKv w`‡q| elvKv‡j cPyewócv‡Zi d‡j fMf‡i AMfxi ¯‡i cwb c‡ek Kivq, Dc‡ii ¯‡ii fvimvg¨ wKQyw eRvq _v‡K| wKš Mfxi ¯‡ii ¶wZ c-Y nq bv| ZvB cwbi ¯i w`b w`b wb‡P †b‡g hv‡”Q| G Ae¯v Pj‡Z _vK‡j bjKv¸‡jv Avi cwbB cv‡e bv Ges AwP‡iB cwi‡e‡ki fvimvg¨ nwi‡q †dj‡e| ZvB mgq _vK‡Z Gi weKí e¨e¯vi wPšv Kiv DwPZ|

e¨e¯vcbv

- we‡ki Ab¨vb¨ †`‡ki gZ G †`‡k elvKv‡j A_vr Avgb tgŠmyg avb Drcv`‡b †ewk ¸iæZ w`‡Z n‡e
- ‡ev‡iv tgŠmyg f-Ðci¯ cwb e¨env‡i gva¨‡g avb Pvl mxgve× ivLv DwPZ
- fMfi¯ cwbi e¨envi avb Pv‡l mxgZ Kiv DwPZ| myeavRbK cwbi¯‡i (Recharagable aquifer) †Kejgvî AMfxi bjKv e¨env‡ii gva¨‡g †ev‡iv avb Pvl Kiv †h‡Z cv‡i
- †m‡Pi cwbi AcPq †iva Ki‡Z n‡e
- Kg cwb e¨envi K‡i ïK‡bv tgŠmyg Ab¨vb¨ A_Kix dmj Pvl Kiv DwPZ hv GLb we‡`k t_‡K Avg`vbx K‡i c‡qvRb wgUv‡bv n‡”Q|

13.2 Kx fv‡e †m‡Pi cwbi AcPq †iva Kiv hvq?

†ev‡iv tgŠmyg av‡bi Rwg‡Z mvavi YZ gwUi KvRv bvjv w`‡q †mP t`qv nq| d‡j dm‡ji Rwg I †m‡Pi cwbi AcPq nq| A_P cwbi Afv‡e A‡bK Rwg †m‡Pi AvIZvq Avbv m¤e nq bv| AZGe †m‡Pi cwbi AcPq †iva Kiv GKvš Rixwi|

cw÷K cvB‡c †mP

e¨e¯vcbv

- Rwgi AcPq †ivaK‡í wcwfwm A_ev cw÷K (wdZv) cvBc e¨envi Kiv hvq
- G c×wZ‡Z †mP w`‡j cwbi AcPq Kgv‡bvi mv‡_ mv‡_ †m‡Pi LiPI Kgv‡bv hvq
- Mfxi ev AMfxi bjKv t_‡K G c×wZ‡Z †mP w`‡j GKB cwigvY cwb w`‡q KvRv bvjvi Zjbvq kZKiv 40-42 fvM †ewk Rwg‡Z †mP t`qv hvq
- GQvov iwe dmj †hgb Mg, fvZv, Avjyg wiP BZ¨vw` Ges Avgb tgŠmyg hLb gv‡V KvRv bvjv bó n‡q hvq ZLb cw÷K cvBc e¨envi K‡i AwZ mn‡R I Aí mg‡q Ges Kg Li‡P dm‡ji Rwg‡Z †mP c`vb Kiv hvq|

13.3 avb Pv‡l memgq `wo‡bv cwb ivLvi c‡qvRb Av‡Q Kx?

avb Pv‡l cwbi c‡qvRbxqZv Ab¨vb¨ dm‡ji t_‡K †ewk| GK †KwR avb Drcv`‡b 2500-4000 wjUvi cwbi c‡qvRb nq| Z‡e Kw•ÿZ djb †c‡Z Rwg‡Z me mgq `wo‡bv cwbi †Kvb c‡qvRb †bB| memgq `wo‡bv cwb‡Z Kwgki msL¨v K‡g djb K‡g hvq| ZvQvov I MÜK I `¯vi Afve t`Lv t`q Ges †ivMevjvB I †cvKvgvK‡oi Avµg Y‡e‡o hvq|

e¨e¯vcbv

- av‡bi Rwg‡Z memgq `wo‡bv cwb bv †i‡L chvqµ‡g 3 w`b Rwg ïK‡bvi ci cybivq †mP w`‡j cvq kZKiv 30 fvM †m‡Pi cwb mvkq nq Ges Zv‡Z djb †Kvb cfve c‡o bv
- Pviv †ivc‡Yi ci 10-15 w`b Rwg‡Z wQcwQ‡c cwb ivLvi c‡i AWD c×wZ‡Z †mP ‡`qv hvq | cwZ †m‡P 5-7 †mwg †mP w`‡Z n‡e| Zvici cwbi¯i Kg‡Z Kg‡Z hLb ch‡e¶Y cvB‡ci Zjvq †cŠ‡Q hv‡e ZLb Avevi †mP w`‡Z n‡e| Gfv‡e t_vo Avmv chš †mP w`‡Z n‡e| t_vo Ae¯vq ci t_‡K av‡bi `yAe¯v chš Rwg‡Z wQcwQ‡c cwb ivL‡Z n‡e| Z‡e avb KvUvi 2 mßvn ce-t_‡K †mP eÜ K‡i w`‡Z n‡e| Gfv‡e †mP w`‡j kZKiv cvq 20-25 fvM cwb Kg jv‡M Ges dj‡b †Kvb ZviZg¨ nq bv|

13.4 m¤úK© †mP Kx Ges Kx fv‡e †`qv hvq?

e„ó wbfi avb Pv‡l mvgwqK fv‡e e„ói Afv‡e Liv †`Lv w`‡j †mP c‡qvM Kiv‡K m¤cÖK© †mP e‡j | erm‡i i e„ói e¨vcKZv I el‡bi ‡gvU mg‡qi Dci Livi cfve A‡bKvs‡k wbfikxj | ZvB †Kvb †Kvb ermi Avg‡b ïaygvÎ GKwU m¤cÖK© †m‡Pi gva¨‡g 60% ev Zvi †ewk djb evov‡bv m¤e |

e¨e¯vcbv

- m¤cÖK© †mP wbKU¯ Mfxi A_ev AMfxi bjKvi †_‡K ‡`qv †h‡Z cv‡i
- ZvQvov wbKU¯ b`x, Lvj-we j, ckvi ev †Wvev †_‡K Abvqv‡k GKwU ev `ÿZv †mP †`qv hvq | KviY ZLb cwbi †Kvb Afve _v‡K bv
- Z‡e Gi Rb¨ ce©c¯ZvZi c‡qvRb | †hgb- ‡mP h‡ši e¨e¯v, bvjv, Aw_K Ges gvbwmK c¯wZ BZ¨w`
- m¤cÖK© †m‡Pi msL¨v I c‡qv‡Mi mgq wbavi‡Yi Rb¨ e„ócv‡Zi Ae¯nv I Livi cwZ we‡kl bRi ivL‡Z n‡e |

13.5 ‡PK fvj Kx Ges †Kb Gi e¨envi Kiv nq?

‡PK fvj GK cKvi hš hv AMfxi bjKvi cwb‡K cv¤ú chš a‡i ivLvi Rb¨ e¨envi Kiv nq | evsjv‡`‡k †mPKZ.Rwgi kZKiv 60 fvM AMfxi bjK‡ci gva¨‡g †mP c`vb Kiv n‡q _v‡K | cwZevi GmKj AMfxi bjKvi Pvjy Kivi mgq cwb PvcK‡j i gva¨‡g gwUi wbP †_‡K cvBc w`‡q cv¤ú chš Zvrj Avb‡Z nq hv cvBwgs bv‡g cwiwPZ | ZvB cwZevi AMfxi bjKvi Pvjy Kivi mgq cv¤ú PvjK cvBwgs mgm¨vi m¤§yLxb n‡q _v‡Kb Ges GRb¨ Kgc‡¶ `ÿR‡bi kvixwiK cwikgmn 15-20 wgwbU mgq AcPq nq |

e¨e¯vcbv

- gvV chv‡q GmKj mgm¨vi mgvavbK‡í evsjv‡`k avb M‡elYv Bbw÷wUDU †PK fvj D™veb K‡i‡Q
- GwU AMfxi bjK‡ci cv¤ú Ges mvKkb cvB‡ci ms‡hvM¯'‡j jwM‡q w`‡j cvBwgs mgm¨vi mgvavbmn cv¤ú PvjK cv¤ú Pvjy Kivi weo¤bv t_‡K i¶v cvq |

14. Liv msµvš

Liv mnbkxj RvZ we avb56

Liv cwinviKvix RvZ we avb57

14.1 Avgb †gŠmjvg Liv mwnòyRvZ †Kvb ¸‡jv Ges Zv‡`i ‰ewkó¨ Kx?

Avgb avb mvaviYZ e„ó wbfi dmj | e„ói Afv‡e Avgb dmj Livq Avµvš n‡j gyó‡gq wKQyRwg‡Z gvÎ m¤úK© †mP †`qv n‡q _v‡K | ZvB cvq ermiB Avg‡bi djb Livq e¨vcK ¶wZM¯ n‡q _v‡K | evsjv‡`k avb M‡elYv Bbw÷wUDU 2011 mv‡j `ÿZv Liv mnbkxj RvZ D™veb K‡i‡Q | Avg‡b RvZ `ÿZv Pvlvev` K‡i A‡bKvs‡k Liv cwZ‡iva K‡i fvj djb cvIhv hvq |

Rv‡Zi ‰ewkó¨

- we avb56 Liv mnbkxj RvZ | cRbb chv‡q 10-12 w`b e„ó bv n‡j I dj‡bi †Zgb ‡Kvb ¶wZ nq bv | RvZwUi RxebKvj 105-110 w`b Ges 16.5-18.0 gY/weNv djb w`‡Z m¶g | Z‡e RvZwU LivKwjZ n‡j 13.0 gY/weNv djb w`‡Z cv‡i | Livi mgq fMf¯ cwbi¯i fe„ó t_‡K 70-80 †mvg wb‡P _vK‡j Ges gwUi Av`Zv 14% Gi wb‡P n‡j I G RvZwU weNv cwZ 11.0 gY djb w`‡Z m¶g |
- we avb57 ga¨g gvÎvi Liv cwinviKvix (Drought escaping) RvZ | cRbb chv‡q GKUvbv 8-10 w`b e„ó bv n‡j I Gi dj‡bi †Zgb †Kvb ¶wZ nq bv | G Rv‡Zi RxebKvj 100-105 w`b Ges cwZ weNvq 16.5-18.0 gY djb w`‡q _v‡K |

15. eb¨v msµvš

¯í RxebKvj RvZ we avb28

¯í RxebKvj RvZ we avb45

15.1 ‡ev‡iv ‡gŠmy‡g nvIo GjvKvq AvK¯§K eb¨v t_‡K Kx K‡i i¶v cvIqv hvq?

nvIo GjvKvq cvKv ev Avav cvKv avb AvK¯§K eb¨vq Zwj‡q hvq| mvaviYZ ˆekvL gv‡mi ZZxq mßvn t_‡K G eb¨v ev Xj ïi“ nq| ZvB cvKv avb i¶vi c‡qvRbxq e¨e¯v wb‡Z n‡e|

e¨e¯vcbv

- Rwgi Ae¯nvb I Xj Avmvi mgq e‡S Dchy³ mí †gqvw` RvZ PvI Ki‡Z n‡e, †hgb-we avb28, we avb45
- mwVK mg‡q exRZjvq exR ecb K‡i 35-40 w`‡bi Pviv †ivcY Ki‡Z n‡e
- mgqgZ BDwiqv mvi Dcwi c‡qvM I Ab¨vb¨ cwiPhv †kI Ki‡Z n‡e
- ‡`wi bv K‡i kZKiv 80 fvM avb cvKvi mv‡_ mv‡_ avb †K‡U †dj‡Z n‡e|

15.2 Avg‡b AvK¯§K eb¨v ceY GjvKvq †Kvb †Kvb RvZ PvI Kiv DwPZ?

RjgM mnbkxj RvZ we avb51

†`‡ki wewfb GjvKvq AvK¯§K eb¨v ceY AÂ‡j †hLv‡b †ivcv Avgb †gŠmy‡g 14-16 w`‡bi eb¨vq RjgM nIqvi m¤¢ebv_v‡K, †mLv‡b we avb51 Ges we avb52 PvI K‡i m‡švlRbK djb †c‡Z cv‡ib|

Rv‡Zi ‰ewkó¨

- we avb51 Ges we avb52 Gi exRZjv 2 mßvn RjgM _vK‡j I Pviv g‡i bv
- Pviv †ivc‡Yi GK mßvn ci 14-16 w`b cwib‡Z Wy‡e _vK‡j I Pviv ¶wZM¯ nq bv
- eb¨vgy³ cwi‡e‡k RvZ `ÖwZi RxebKvj 140-145 w`b Ges 14 w`‡bi AvK¯§K eb¨v Kewjz n‡j RxebKvj 155-160 w`b
- Dchy³ cwiPhv †c‡j AvK¯§K eb¨vq 14-16 w`b Wy‡e _vK‡j I 15-17 gY/weNv djb w`‡Z m¶g
- eb¨vi cwib m‡i hvIqvi 7 w`b ci cwib t¯úK‡i Mv‡Qi cvZv a‡yq cwi®vi K‡i w`‡Z n‡e
- eb¨vi 7-10 w`b ci Rwg AvMvQv gy³ K‡i BDwiqv Dcwi c‡qvM Ges 3 †KwR GgIwc mvi cwZ weNvq c‡qvM Ki‡Z n‡e|

15.3 Avg‡b eb¨v cieZx †Kvb RvZwU PvI K‡i AwaK djb cvIqv hv‡e?

evsjv‡`‡k cvq ermiB eb¨vq Avgb av‡bi e¨vcK ¶wZ n‡q _v‡K| Avgb av‡bi cvq 22% Rwg eb¨v ceY GjvKvi AvIZvf³| G mKj GjvKvq KI‡Kiv mvaviYZ bwe RvZ ‡hgb- bvBRvikvBj PvI K‡i| G‡¶‡Î weAvi22, weAvi23 I we avb46 PvI K‡i bvBRvikvB‡j i †P‡q weNv cwZ 4.0-5.5 gY AwaK djb †c‡Z cv‡ib|

bwe RvZ weAvi 22

e¨e¯vcbv

bwe RvZ weAvi 23

- bwei †¶‡Î 40-50 w`‡bi Pviv fv` gv‡mi ïi“ t_‡K †kI chš (15 †m‡Þ¤i) †ivcY Kiv hv‡e
- bwe †ivc‡Yi †¶‡Î 5-7wU K‡i Pviv †ivcY Ki‡Z n‡e
- bwe‡Z †ivcY `iZ 20×15 †mwg nIqv DwPZ
- Z‡e fv` gv‡mi c‡i Avi †Kvb avb ‡ivcY Kiv DwPZ bq|

15.4 Avgb †gŠmÿg av‡bi Pviv eb¨vq ¶wZM¯ n‡j weKí Kx Kiv hvq?

eb¨vq ¶wZM¯n GjvKvq Pvwl iv †gŠmÿgi †kl chv‡q bZÿ K‡i Pviv ˆZwi Ki‡Z cv‡i bv weavq ¶wZM¯n Rwg‡Z cb-ivq Pviv ‡ivcY Kiv m¤e nq bv| eb¨vgÿ GjvKvi av‡bi Rwgi gÿ †MvQv †_‡K 2/3wU Kwk †f‡½ Avjv`v Ki‡j dj‡b ‡Zgb †Kvb ¶wZ nq bv| Kwk †f‡½ jvMv‡bv Rwg‡Z djb weNv cwZ 13-15 gY cvIqv hvq| Z‡e avb cvK‡Z mvaviYZ 3-12 w`b †ewk mgq jv‡M|

e¨e¯vcbv

- †h mKj Rwg eb¨vq ¶wZM¯ nqwb Ggb Rwg n‡Z 30-40 w`b eq‡mi av‡bi ¸wQ ‡_‡K 2-3wU Kwk †f‡½ Avjv`v Ki‡Z n‡e
- bZÿ Rwg‡Z cwZ †MvQvq 2-3wU Kwk wbawiZ `i‡Z †ivcY Ki‡Z n‡e
- Rwgi DeiZv Ges av‡bi Rv‡Zi Kwk MRv‡bvi ¶gZvi Dci wfwË K‡i GKK GjvKvi fv½v Kwk w`‡q 4-8 ¸Y bZÿ Rwg jvMv‡bv hvq
- mvi c‡qvM, AvMvQv `gb, cwb e¨e¯nvcbv I Ab¨vb¨ cwiPhv mvfweK fv‡e jvMv‡bv Pvivi gZB Ki‡Z n‡e|

15.5 fvmgvb exRZjv Kx Ges †Kb Kiv nq?

eb¨vi cwb‡Z Wÿe hvIqvi Kvi‡Y exRZjv Kivi gZ DÿRwg cvIqv bv †M‡j A_ev cwb †b‡g hvIqvi ci Pviv ˆZwii Rb¨ h‡_ó mgq cvIqv bv †M‡j fvmgvb exRZjv ˆZwi Kiv †h‡Z cv‡i|

fvmgvb exRZjv ˆZwi

fvmgvb exRZjv

‰Zwii c×wZ

- c_‡g eb¨vi cwb, cÿKzi, †Wvev ev Lv‡ji Dci evÿki PvUvB‡qi gvPv ev KjvMv‡Qi †fjv ˆZwi Ki‡Z n‡e
- Zvi Dci 2-3 †mw›UwgUvi cÿ Kv`vi ¯i w`‡q Kv`vgq exRZjv ˆZwi Ki‡Z n‡e
- Gici mvfweK wbq‡g AsKwiZ exR H exRZjvq †dj‡Z n‡e
- exRZjv hv‡Z †f‡m bv hvq †mRb¨ LÿUi mv‡_ †ewa ivL‡Z n‡e
- cwb‡Z fvmgvb _vKvi Kvi‡Y Gi¦c exRZjvq mvaviYZ cwb †m‡Pi `iKvi nq bv|

16. jeYv³ Zv msµvš

weAvi23

we avb40

we avb41

we avb53

16.1 jeYv³ Zv av‡bi Kx ¶wZ K‡i Ges Gi cwZKv‡ii Dcvq Kx?

†ewk jeYv³ Zvi Rb¨ avb Mv‡Qi Dc‡ii cvZv A_vr bZyb cvZv mv`v‡U weeY n‡q gPo hvq Ges cywZb cvZv njy †_‡K ev`wg iO avi Y K‡i | Mv‡Qi evo-evowZ Amgvb, MvQ Lv‡Uv, Kwk Kg nq, wkl mv`v n‡q hvq Ges Qov fvj fv‡e †ei nq bv, `vbv †QvU nq I wPUv n‡q hvq Ges wkKo gvi v hvq | jeYv³ Zv RwbZ mgm¨v Avgv‡`i †`‡k DcKjeZx AÂ‡j ‡ev‡i v †gŠmyg †ewk Ges Avgb †gŠmyg I wKQz cwi j¶Z nq |

e¨e¯vcbv

- avb Pv‡l i mgq Rwg‡Z me mgq wKQz cwb a‡i ivL‡Z n‡e
- ewó ev wgVv cwbi mvnv‡h¨ †mP w`‡Z n‡e
- wKQz `b cici Rwgi cwb cwieZb K‡i w`‡Z n‡e
- jeY cwZ‡iva ¶gZvm¤úb av‡bi RvZ ‡hgb- †ev‡i v †gŠmyg we avb47, Avgb †gŠmyg weAvi23,we avb40, we avb41, we avb53 I we avb54 Pvl Ki‡Z n‡e
- weNv cwZ 300-400 †KwR QvB c‡qvM Kiv DËg |

16.2 †ev‡i v‡Z jeYv³ AÂ‡j i RvZ †KvbwU?

avb mvavi YZ jeYv³ Zv ms‡e`kxj dmj | G Kvi‡Y jeYv³ GjvKvq we‡kl K‡i †ev‡i v †gŠmyg Ddkx avb Pvlvev` e¨vnZ nq | †ev‡i v †gŠmyg avb Mv‡Qi cyi v RxebKvj jeYv³ Zvi Avl Zvq c‡o |

jeY mnbkxj RvZ we avb47

Rv‡Zi ‰ewkó¨

- we avb47 Gi cyi v RxebKvj ga¨g gvÎv i (6 wWGm/wgUv i) jeY mnbkxj
- RvZwUi RxebKvj 152 w`b Ges jeYv³ cwi‡e‡k weNv cwZ djb 22 gY
- AZGe jeYv³ GjvKvq we avb47 Pvl K‡i †ewk djb cvl qv hv‡e |

16.3 Avg‡b jeYv³ AÂ‡j i RvZ †Kvb ¸‡jv Ges G‡`i ˆewkó¨ Kx?

evsjv‡`‡ki DcKjxq AÂ‡j cvq 8.5 jvL †n±i Rwg‡Z wewfb gvÎvq jeYv³ Zv i‡q‡Q | jeYv³ Zvi Rb¨ av‡bi Pvl wewNZ nq | Pvi v I cRbb chv‡q we avb40, we avb41, we avb53 I we avb54 AšZ 8-10 wWGm/wgUv i A_vr ga¨g gvÎvq jeYv³ Zv mn¨ Ki‡Z cv‡i | AZGe Gme AÂ‡j jeYmnbkxj av‡bi RvZ Pvl K‡i ¯nvbxq Rv‡Zi PvB‡Z AšZ wØ¸Y djb cvl qv m¤e |

Rv‡Zi ‰ewkó¨

- weAvi23, we avb40, we avb41, we avb53 I we avb54 gvSwi wbPyAÂ‡j i †ivcv Avgb †gŠmyg Pvlvev` Dc‡hvMx I jeY mnbkxj
- Dchy³ cwi Phvq Gme Rv‡Zi djb 17-20 gY/weNv cvl qv hvq |

16.4 jeYv³ GjvKvq jeYhy³ cwb †mP wn‡m‡e e¨envi Kiv hv‡e Kx?

evsjv‡`‡ki DcKiY¨xq AÂ‡j cvq 8.5 j¶ †n±i Rwg wewfb gvÎvi jeYv³Zv Kewjqv| avb mvaviYZ jeYv³Zv ms‡e`bkxj dmj| Gme AÂ‡ji fMf¯ Ges b`xi cwb wewfb gvÎvq jeYv³Zv _v‡K| G Kvi‡Y jeYv³ GjvKvq we‡klK‡i †ev‡iv †gŠmy¨g Ddkx avb PvIvev` e¨vnZ nq|

e¨e¯vcbv

- hw` †m‡Pi cwbi jeYv³Zv 3 wWGm/wgUvi ev Zvi Kg nq Zvn‡j fMf¯ ev b`xi cwb e¨envi K‡i †hLv‡b gwUi jeYv³Zv 5-6 wWGm/wgUvi Av‡Q †mLv‡b mn‡RB we avb47 PvI Kiv hv‡e
- Z‡e 3 wWGm/wgUvi Gi †P‡q †ewk gvÎvi jeYv³Zvhy³ cwb KLbI †m‡Pi Rb¨ e¨envi Kiv hv‡e bv| G‡Z gwUi jeYv³Zv Av‡ivew„× cv‡e|

16.5 wPswoi †N‡i avb PvI Kiv hv‡e Kx?

DcKiY¨xq AÂ‡j avbx Rwg‡K wPswoi †N‡i cwiYZ Kiv nq _v‡K| Z‡e †ev‡iv †gŠmy¨g †N‡i gvQ PvI nq bv weavq cwZZ _v‡K| ZvQvov wKQyRwg bvbv Kvi‡Y †N‡ii ewn‡i P‡j Avm‡Q wKš jeYv³Zvi Rb¨ avb PvI Kiv hvq bv|

e¨e¯vcbv

- hw` †m‡Pi cwbi jeYv³Zv 1 wWGm/wgUvi Gi g‡a¨ _v‡K Zvn‡j †m‡Pi cwb (fMf¯ A_ev b`xi cwb) e¨envi K‡i wPswoi †N‡i †hLv‡b gwUi jeYv³Zv 10-12 wWGm/wgUvi nq †mLv‡b we avb47 PvI Kiv hvq
- Z‡e cwZ mßv‡n †¶‡Zi c‡ei cwb wb®wkb Ki‡Z n‡e Ges bZyb cwb w`‡q †mP w`‡Z n‡e|

wPswoi †Ni

17. kxZ msµvš

kxZvµvš avbMvQ

17.1 †ev‡iv †gŠmy¨g cPÐ kxZ ‡_‡K Kx fv‡e Pviv i¶v Kiv hvq?

exRZjv cwiPhvi gva¨‡g cPÐ kxZ †_‡K Pviv i¶v Kiv hvq| kx‡Zi Rb¨ Pviv evo-evowZ e¨vnZ nq| GgbwK cPÐ kx‡Z Pviv g‡i I †h‡Z cv‡i| GgZve¯vq exRZjvi cwiPhv AZ¨vek¨K|

e¨e¯vcbv

- cPÐ kx‡Zi iv‡Z exRZjv cwjwb`‡q †X‡K ivL‡j VvÐvRwbZ ¶wZ †_‡K Pviv i¶v cvq
- Zxe kx‡Z exRZjvq `vovbv cwb ivL‡j Pviv m‡ZR _v‡K Ges Kg ¶wZM¯nq
- Pviv nj‡` n‡q †M‡j cwZ eMgUv‡i 7 Mvg ev cwZ kZvs‡k 280 Mvg K‡i BDwiqv mvi Dcwi c‡qvM Ki‡Z n‡e|

17.2 ‡ev‡iv‡Z VvÐv mwnòyRvZ †Kvbwu?

AwZwi³ VvÐv ceY GjvKvq kx‡Z Mv‡Qi evo-evowZ e¨vnZ nq Ggb wK Pviv g‡i hvq| Gme †¶‡G VvÐv mwnòyRvZ ‡hgb-we avb36 PvIvev` Kiv DwPZ|

VvÐv mwnò RvZ we avb36

Rv‡Zi ˆewkó¨

- we avb36 GKwU AvMvg Ges VvÐv mwnòyRvZ
- AwaK VvÐvq GRv‡Zi Pviv mn‡R g‡i bv|

18. av‡bi wPUv msµvš

18.1 ‡ev‡iv †gŠmy‡g avb †ewk wPUv nq †Kb?

mvaviYZ av‡b kZKiv 15-20 fvM wPUv nt‡Z cv‡i| wPUvi cwigvY Gi †P‡q †ewk n‡j eS‡Z n‡e t_vo t_‡K dz‡i †dvUv Ae¯vq dmj †Kvb bv †Kvb cwZKjZvi wkKvi n‡q‡Q| †hgb- Amnbxq Mig, Liv, So, †ivM I ‡cvKvgvK‡oi Avµgy BZ¨w`| avb t_vo t_‡K dz‡i †dvUv Ae¯vq †Kvb cwZKj Ae¯nvi wkKvi n‡j gvGwZwi³ wPUv n‡q hvq| KvBP‡_vo t_‡K t_vo Ae¯'vq iv‡Zi Zvcgv‡Îv 12-13 wWM †mjwmqvm ev Gi bx‡P Ges w`‡bi Zvcgv‡Îv 28-29 wWM †mjwmqvm ev Gi bx‡P nq Zvn‡j avb wPUv nIqvi Rb¨ `vqx| GgZve¯vq 5-6 w`b ‰kZ¨ cevn Pj‡Z _vK‡j av‡bi AwZwi³ wPUv nIqvi Avk¼v_‡K| ZvQvov Liv i Kvi‡Y wk‡l kvLv e„× e¨vnZ nq Ges weKZ.I eÜv av‡bi Rb¥ t`qvq wPUvi msL¨v †e‡o hvq|

e¨e¯vcbv

- dz‡i †dvUvi mgq Zvcgv‡Îv 35^{0} (wWM) †mjwmqvm ev Zvi Dc‡i 1-2 N›Uv weivR Ki‡j av‡b gv‡Îwwi³ wPUv n‡q hvq
- cPÐ S‡ov evZv‡m MvQ t_‡K cwb c‡m`b cwµqvq †ewi‡q hvq, Avevi S‡ov evZvm civMvqY, Mfavi Y I Pv‡j i e„× e¨vnZ K‡i, d‡j av‡bi iO L‡qwi ev Kv‡jv n‡q wPUv n‡q hvq
- ‡ev‡iv avb AMnvq‡Yi ï i‡Z exR ecb K‡i 40-45 w`‡bi Pviv †ivcY Ki‡j av‡bi t_vo Ges dz‡i †dvUvi mgq Amnbxq D"P Zvcgv‡Îvq co‡e bv weavq wPUv t_‡K i¶v cv‡e|

18.2 Avgb †gŠmy‡g avb wPUv nIqvi cavb KviY Kx?

Avgb †gŠmy‡g Livi Kvi‡Y wk‡l kvLv e„× e¨vnZ nq Ges weKZ.I eÜv av‡bi Rb¥ t`qvq wPUvi msL¨v †e‡o hvq|

av‡bi wPUv

e¨e¯vcbv

- ‡ivcv Avgb avb kve‡Yi ï i‡Z exR ecb K‡i Dchy³ eq‡mi Pviv †ivcY Ki‡j av‡bi t_vo Ges dz‡i †dvUv Amnbxq wbg Zvcgv‡Îvq co‡e bv weavq wPUv Kg n‡e
- mí Av‡jvK-ms‡e`bkxj RvZ Ges Av‡jvK-Ams‡e`bkxj RvZ †Kvbµ‡gB 31 fv‡`i c‡i †ivcY Kiv DwPZ bq| PvIev‡` Gme wbqg cvj‡bi gva¨‡g av‡bi wPUv Kgv‡bv m¤e|

19. avbMvQ †n‡j cov msµvš

†n‡j cov avb‡ÿZ

†n‡j cov avb‡ÿZ

19.1 avb MvQ †n‡j c‡o †Kb Ges GicwZKv‡i i Dcvq Kx?

avb MvQ m‡ev"P Kvk Ae¯v t_‡K cvKv Ae¯vq S‡ov nvIqv ev Ab¨vb¨ Kvi‡Y †n‡j co‡Z cv‡i| t_vo Ae¯vq MvQ c‡o †M‡j wkI ewni n‡Z cv‡i bv, Avi ewni n‡j I dz‡i †dvUv Ges civMvqY weNZ nq weavq AwZwi³ wPUv n‡q hvq| `xN Ae¯vq, `vbv k³ nIqv Ae¯vq ev cvKv chv‡q c‡o †M‡j I dj‡bi h_ó ¶wZ nq| cvKv avb †n‡j cwb‡Z c‡o †M‡j ex‡Ri ¸Yv¸Y bó n‡q hvq|

cwZKvi

- mvaviYZ avb Mv‡Qi wb‡Pi w`‡Ki Avšce (Internode) ¸‡jv Lv‡Uv Ges Dc‡ii w`‡Ki ¸‡jv j¤v n‡q _v‡K| hw` †Kvb Rv‡Zi wb‡Pi w`‡Ki Avšce Kg cy¨ Ges j¤v nq Zvn‡j mn‡RB MvQ evZv‡m †n‡j c‡o| GKvi‡Y we avb32 Gi †n‡j covi ceYZv ‡ewk| Aci w`‡K weAvi11 I Ab¨vb¨ Rv‡Zi D³ mgm¨v bv _vKvq MvQ †n‡j c‡o bv
- ‡n‡j cov cwZ‡ivax RvZ PvI Ki‡Z n‡e
- myg mvi mwVK gv‡Îvq mwVK mg‡q c‡qvM Ki‡Z n‡e|

†n‡j cov RvZ we avb32

20. k¨vIjv msµvš

20.1 †ev‡iv avb †¶‡Z k¨vIjv Kx fv‡e ¶wZ K‡i Ges Gi cwZKv‡ii e¨e¯v Kx?

k¨vIjv bvB‡Uv‡Rb mvi Mn‡Y cwZ‡hvMZv K‡i av‡bi Pvivi evo-evowZ Kwg‡q †`q| AvµgY †ewk n‡j h_vmg‡q `gb e¨e¯v bvwb‡j Kvk d¨vKv‡m n‡q djb K‡g hvq|

k¨vIjv Avµvš †ÿZ

cwZKvi

- k¨vIjv nIqvi m¤vebv _vK‡j e¨vmvj bvB‡Uv‡Rb bv w`‡q †ivc‡Yi 10 w`b ci Dcwi c‡qvM Ki‡Z n‡e
- Pvivi wkKo MRv‡bv chš Kg D”PZvq (wQcwQ‡c) cwb ivL‡Z n‡e
- †ewk Avµvš Rwg‡Z 150-250 Mvg Z‡Z (Kcvi mvj‡dU) ewj i mv‡_ wgwk‡q cwZ weNvq wQwU‡q w`‡Z n‡e
- AWD c×wZ‡Z ‡mP w`‡j k¨vIjv nIqvi m¤vebv K‡g hvq|

21. fvZ msµvš

21.1 weAvi26 Gi fvZ big n‡q hvq †Kb Ges Gi cwZKvi Kx fv‡e Kiv hvq?

weAvi26 †ivcv AvD‡ki RvZ| GwU †ev‡iv †gŠmy¨g AvMvg RvZ wnmv‡e I PvI Kiv hvq| Gi Pvj mv`v, j¤v, wPKb Ges fvZ big I wKQyy AvVv‡jv| Gi KviY weAvi26-G G¨vgvB‡jv‡Ri cwigvY 23%| †hme Rv‡Z G¨vgvB‡jvR 25-30% †m¸‡jvi fvZ k³ Ges SiS‡i nq| G¨vgvB‡jv‡Ri cwigvY 20-25% n‡j fvZ big Ges wKQyy AvVv‡jv nq| hw` G¨vgvB‡jv‡Ri cwigvY LyeB Kg (2-10%) nq Z‡e fvZ †ewk AvVv‡jv n‡q hvq, †hgb weiæBb (8.0% G¨vgvB‡jvR)| ZvB weiæB‡bi fvZ fv‡c ivbv Ki‡Z nq|

weAvi26

cwZKvi

- weAvi26 Gi avb ev Pvj wKQyy` b (2-3 gvm) N‡i ivLvi ci ivbv Ki‡j fvZ SiS‡i nq Ges AvVv‡jv fve _v‡K bv
- cwb †dvUv‡bvi ci Zv‡Z PvDj †Q‡o w`‡q ivbv Ki‡j D³ mgm¨v nq bv|

22.2 fv‡Zi gv‡o Kx cwigvY cyó _v‡K Ges Zv Kx fv‡e i¶v Kiv hvq ?

cyóm¤§Z fvZ ivbvi c×wZ m¤ú‡K Ávb bv _vKvq †`‡k cwZeQi wecyy cwigvY Lv‡`¨i AcPq n‡”Q| ïayfv‡Zi gv‡oi mv‡_ 10-15% cyó P‡j hvq| gvo bv †d‡j fvZ ivbv Ki‡j GB AcPq †iva Kiv hvq| G‡Z K‡i eQ‡i 40-50 j¶ Ub mgcwigvY Pv‡j i AcPq †iva Kiv m¤e|

fvZ I gvo

cwZKvi

- ewU ev emv fvZ A_vr fv‡Zi gvo bv †d‡j ivbvi mgq cwb ïwK‡q ‡d‡j GB AcPq †iva Kiv hvq|

22. Avgb PvI msµvš

we avb33

we avb39

we avb56

we avb57

22.1 Avg‡b mwieK djb Kx fv‡e e„× Kiv hvq?

‡ivcv Avgb gj‡Z e„ówbfi dmj | Avenv Iqvi cwieZ‡bi d‡j mviv t`‡k e„ócv‡Zi cwigvY Ges Gi ïi¤ I †k‡li g‡a¨ weivU cv_K¨ cwijw¶Z n‡"Q | h_vmg‡q e„ócvZ bv nIqv Ges †mP mye¨av we`¨gvb _vKv m‡Ë I mgqgZ e¨envi bv Kivi d‡j mwVK mg‡q mwVK eq‡mi Pviv †ivcY Kiv m¤e nq bv | djkwZ‡Z cieZx chv‡q A_vr KvBP‡_vo t_‡K `vbv cý nIqv chš Livi cfv‡e djb `vi¤Yfv‡e ¶wZM¨ nq |

cwZKvi

- h_vh_ e¨e¯v Mn‡Yi gva¨‡g we`¨gvb †mP e¨e¯v mPj ti‡L †ivcv Avgb †gŠmy‡g mgqgZ †ivcY I c‡qvR‡b dm‡ji cieZx chv‡q m¤úi‡K †mP c`v‡bi gva¨‡g t`‡k av‡bi Drcv`b e„× Kiv m¤e |

22.2 iwe dm‡ji weNbv NwU‡q Kx fv‡e Avgb PvI Kiv hvq?

Dchy³ ¯í RxebKv‡ji RvZ PvI K‡i Avgb dmj KwZ‡Ki gvSvgwS †K‡U mgqgZ iwe dmj †hgb- Wvj, †Zj, Mg Avev` Kiv hvq | Zv‡Z D³ dmjmg‡ni dj‡bi †Zgb †Kvb Amye¨av nq bv |

cwZKvi

GB me‡¶‡Î we avb33, we avb39, we avb56 I we avb57 PvI Ki¤b |

23. av‡bi djb msµvš

23.1 av‡bi djb Kg nIqvi KviYmgn-Kx Ges G¸‡jvi cwZKv‡ii e¨e¯v Kx?

wewfbKvi‡Y av‡bi Kw•ÿZ djb ARbKiv m¤e nq bv | Zvi g‡a¨ avb Drcv`b c×wZi mwVK e¨e¯vcbvi Afve, †ivMevjvB I cvKwZK wechq cavb | ZvB mý e¨e¯vcbvi gva¨‡g av‡bi djb A‡bKvs‡k evov‡bv m¤e |

cwZKvi

- †gŠmy I AÂj†f‡` mwVK RvZ wbevPbt †gŠmy I cwi‡ek Dc‡hvMx av‡bi RvZ Ges avb Drcv`b e„×i Rb¨ dmj, gwU, cwb, mvi BZ¨vw` weIqK Kjv‡KŠkj mwVK fv‡e c‡qvM Ki‡Z n‡e
- avb Mv‡Qi evo-evowZ mwVK chv‡q ivLvt wewfb Lv‡`¨vcv`v‡bi NvUwZ ev AwaK¨Zvi Rb¨ avb Mv‡Qi e„×‡Z wei¤c cwZwµqv mó nq | Kw•ÿZ djb †c‡Z n‡j myg gvÎvq mwVK mvi c‡qvM Ki‡Z n‡e
- mgqgZ mvi Dcwi c‡qvMt Kwk MRv‡bvi c_g I gvSvgwS chv‡q Ges KvBP‡_vo Avmvi mgq MvQ †ewk cwigv‡Y bvB‡Uv‡Rb mvi MnY K‡i _v‡K, ZvB mgqgZ Dcwi c‡qvM Ki‡Z n‡e
- mwVK mg‡q Pviv †ivcYt mg‡qi Av‡M ev c‡i avb PvI Ki‡j †gŠmy‡f‡` av‡bi djb weNv cwZ 4-8 gY K‡g †h‡Z cv‡i, myZivs AwaK djb †c‡Z n†j mwVK mg‡q avb †ivcY Ki‡Z n‡e
- mwVK `i‡Z Pviv †ivcYt Pviv †ivc‡Yi `i‡Zi e¨eav‡bi Rb¨ av‡bi dj‡bi cv_K¨ n‡q _v‡K, †hgb- av‡bi RvZ, Pviv †ivc‡Yi mgq, Pviv i eqm Ges gwUi DeiZvi ZviZ‡g¨i Rb¨ Pviv †ivc‡Yi `yZ Kg †ewk Ki‡Z nq | mwVK `i‡Z Pviv †ivcY Kiv n‡j †ewk cwigv‡Y Kwk I Qov cvIqv hvq weavq djb ev‡o | †ivc‡Yi Rb¨ mwi t_‡K mwi i 20-25 †m»UwgUvi Ges ¸wQ t_‡K ¸wQi 15-20 †m»UwgUvi `i‡Z w`‡Z n‡e
- mwVK Mfx‡i Pviv ‡ivcYt gwUi 2-3 †m»UwgUvi MfxiZvq Pviv †ivcY Kiv DËg | mwVK MfxiZvq Pviv †ivcY Ki‡j Pvivi evo-evowZ `¤Z ïi¤ nq Ges Kwki msL¨v ev‡o hvq weavq djbI ev‡o
- Rwg‡Z cwigZ †m‡Pi cwb ivLvt Rwg‡Z AwZwi³ `vovbv cwb _vK‡j Kwki msL¨v K‡g hvq | Rwg‡Z 4-10 †mwg cwb ivL‡j djb ev‡o Ges AvMvQv `g‡b mvnvh¨ K‡i
- evjvB e¨e¯vcbvt mwVK mg‡q mwVK e¨e¯vcbvi gva¨‡g ‡ivM I †cvKv `gb K‡i Kw•ÿZ djb cvIqv m¤e |

24. avb KvUv msµvš

avb KZb

24.1 avb KvUvi Dchy³ mgq KLb?

80 fvM cvKv avb

Rwg‡Z avb †c‡K †M‡j KvU‡Z †gv‡UB wej¤ Kiv DwPZ bq | AwaK cvKv Ae¯vq dmj KvU‡j A‡bK avb S‡i c‡o, wkl †f‡½ hvq Ges cvwLi I Bùyi Avµg Y n‡Z cv‡i | G‡Z djb K‡g hvq | ZvB cvKvi ci †`wi bv K‡i h_vmg‡q avb KvUv DwPZ |

cwZKvi

- wk‡li AM fvM †_‡K avb cvKv ïiæ nq | ZvB Rwg‡bi †ewki fvM wk‡li AM fv‡Mi kZKiv 80 fvM av‡bi Pvj k³ n‡j Ges wb‡Pi As‡k kZKiv 20 fvM av‡bi Pvj AvswkK k³ I m"Q n‡jB avb wVKg‡Zv †c‡K‡Q e‡j a‡i wb‡Z n‡e Ges ‡`wi bv K‡i avb ‡K‡U †dj‡Z n‡e |

25. avb exR msµvš

fvj exR

Lvivc exR

25.1 exR avb Drcv`‡bi mnR Dcvq Kx?

fvj ex‡R fvj djb | AwaK djb †c‡Z n‡j fvj ex‡Ri c‡qvRb | ¸YMZ exR bv n‡j Kvw•ÿZ djb Avkv Kiv hvq bv |

e¨e¯vcbv

exR av‡bi wbawiZ ¯vb

- †h Rwgi avb fvj n‡q‡Q, †ivM I †cvKvgvK‡oi Avµg Y nqwb Ges AvMvQvgy³ †m me Rwgi avb exR wnmv‡e ivLvi wm×vš wb‡Z n‡e
- avb KvUvi Av‡MB weRvZxq (Off type) MvQ ‡K‡U †dj‡Z n‡e | †hme Mv‡Qi AvKvi AvKwZ, wk‡li aib, av‡bi AvKvi-AvKwZ, iO I ïO Ges avb cvKvi mgq Rwgi AwaKvsk MvQ †_‡K GKUyAvjv`v †m¸wjB weRvZxq MvQ
- mKj †ivMvµvš MvQ Acmvi Y Ki‡Z n‡e
- Gici dmj KZb Ges Avjv`v fv‡e gvovB, SvovB K‡i fvj fv‡e †iv‡` ïwK‡q msi¶Y Ki‡Z n‡e |

25.2 ev`jv w`‡b Kx fv‡e exR avb ïKv‡bv hvq?

eÿói w`‡b exR avb gvovB Kiv I ïKv‡bv KóKi | GgZve¯vq exR avb cvjv w`‡q †i‡L w`‡j ex‡Ri ¸YMZ gvb bó n‡q hvq | ZvB mvgwqK fv‡e exR wKQzv ïKv‡bvi e¨e¯v Ki‡Z n‡e |

e¨e¯vcbv

- wkl †K‡U †QvU †QvU AvwU K‡i N‡ii wfZi Svzj‡q ïKv‡Z n‡e | c‡i †iv‡` fvj K‡i ïwK‡q wb‡Z n‡e
- ev`jv w`‡b exR Wvqv‡i ïKv‡bv DwPZ
- N‡i ˆe`ÿZK d¨v‡bi evZv‡mi mvnv‡h¨I exR ïKv‡bv †h‡Z cv‡i |

25.3 avb KvUvi mv‡_ mv‡_ H avb exR wnmv‡e c ieZx dm‡j i Rb¨ e¨envi Kiv hv‡e Kx?

‡Kvb †Kvb av‡bi Rv‡Z cY-Rxewbkw³ (Viability) _vKv m†Ë I AsK‡ziv`Mg‡bi AbyKj cwi‡ek †c‡j exR AsKwiZ nq bv | ex‡Ri G ‰ewkó¨‡K mßZv ev Nyš Ae¯v e‡j | ex‡Ri mßZv‡K 4 fv‡M fvM Kiv nq, †hgb `xN †gqv`x, ga¨g †gqv`x, `yj I mßZvwenxb exR | cvKwZK fv‡e ex‡Ri mßZv 2-12 mßv‡ni g‡a¨ †K‡U hvq | mßZv bv KvUv ev fv½v chš exR avb MRv‡e bv | D‡j L¨, Ddkx RvZmgn-ga¨g ev `yj mßZv m¤úb Ges ¯vbxq AvDk RvZ¸‡jv mßZvwenxb ejv P‡j |

e¨e¯vcbv

- ïK‡bv avb GKvav‡i 4-5 w`b Kov †iv‡` (50 wWwM †mw›U‡MW ZvcgvÎvq) ïKv‡j AwaKvsk ex‡Ri mßZv †f‡½ hvq | Z‡e `xN †gqv`x mßZv fv½‡Z 7-10 w`b fvj K‡i ïKv‡Z n‡e
- ivmvqwbK Dcv‡q 0.1% bvBwUK GwmW `e‡Y 24 N›Uv wfwR‡q †i‡L ex‡Ri mßZv fv½v‡bv hvq
- ¯vbxq AvDk av‡bi RvZ¸‡jv KvUvi ci ciB exR wnmv‡e e¨envi Kiv hvq †h‡nZzRvZ¸‡jv mßZvwenxb
- ex‡Ri mßZv bv fv½v chš ‡m avb exR wnmv‡e e¨envi Kiv hv‡e bv |

25.4 ev`jv w`‡b wK fv‡e ex‡Ri AsK‡ziv`Mg †iva Kiv hvq?

mvaviYZ `yj ev mßZvwenxb RvZ¸‡jv AwaK mgq a‡i ewói cvwb †c‡j cvKv avb gv‡V ev DVv‡b cvjv Ae¯vq MwR‡q hvq | ZLb GmKj avb exR wnmv‡e e¨envi Kiv hvq bv GgbwK av‡bi ¸Yv¸YI bó n‡q hvq |

e¨e¯vcbv

- avb †c‡K †M‡j Avi †`wi bv K‡i ewói Av‡MB †K‡U mv‡_ mv‡_ gvovB-SvovB K‡i †iv‡` ïwK‡q wb‡Z n‡e
- ev`jv w`‡b exR avb Wvqv‡i ïKv‡bvi e¨e¯v Ki‡Z n‡e
- ev`jv w`‡b cvKv avb gv‡V wf‡R †M‡j †`wi bv K‡i gvovB-SvovB K‡i evZv‡m ev d¨v‡bi evZv‡m mvgwqK wKQzv ïKv‡bvi e¨e¯v Ki‡Z n‡e Ges c‡i †iv‡` fvj K‡i ïKv‡Z n‡e |

25.5 †gwk‡b gvovB Ki‡j exR av‡bi ¶wZ nq Kx?

exR avb mwVK mg‡q gvovB I SvovB Kiv GKwU ¸iæZcY-KvR | Miæi gjb w`‡q, Mv‡Qi ¸wo ev Wv‡g wcwU‡q avb gvovB Kiv nq, hv kvixwiK fv‡e Kó`vqK Ges mgq †ewk jv‡M Avi G‡Z av‡bi ¶wZi cwigvYI †ewk | ZvB AvovB evwo ev cv‡q gvov‡bvi K_v ejv n‡q _v‡K | wKš exR Drcv`b dvg ev eo Pvwli c‡¶ GB chy³ AbyviY Kiv m¤e bq |

e¨e¯vcbv

- Gme †¶‡Î we km¨ gvovB hš (I‡cb Wvg †_mvi I †KvIR Wvg †_mvi) exR avb gvovB Gi Rb¨ Dc‡hvMx | Z‡e †Kvb Ae¯v‡ZB †gwk‡bi AviwcGg (RPM) 700 Gi †ewk †`qv hv‡e bv | G fv‡e gvovB Ki‡j exR av‡bi †Kvb ¶wZ n‡e bv |

exRavb gvovB

25.6 exR avb msi ¶‡Yi c×wZ mgn-Kx?

exR msi ¶‡Yi Dci ex‡Ri ¸YMZ gvb A‡bKvs‡k wbfikxj | ZvB Av`k exR msi ¶‡Yi Kjv‡KŠkj †g‡b ex‡Ri ¸YMZ gvb eRvq ivL‡Z n‡e |

c×wZmgn-

- avb gvovB Kivi ci †iv‡` 5-6 w`b fvj fv‡e ïwK‡q wb‡Z n‡e †hb ex‡Ri Av`Zv kZKiv 12 fv‡Mi wb‡P_v‡K
- `uZ w`‡q exR KvU‡j hw` KU K‡i kã nq Zvn‡j eyS‡Z n‡e exR wVKgZ ïwK‡q‡Q
- cyó avb evQvB Ki‡Z Kzjv w`‡q Kgc‡¶ `ÿevi †S‡o wb‡Z n‡e

wewfb c×wZ‡Z exRavb msiÿY

- evqÿivax cv‡Î exR ivLv DwPZ | exR ivLvi Rb¨ Wvg, we¯ÿz ev †K‡ivwm‡bi wUb e¨envi Kiv fvj
- gvwUi gUKv ev Kj‡m exR ivL‡j Zvi Mv‡q `ÿevi Avj KvZivi c‡jc w`‡q ïwK‡q evq‡ivax K‡i wb‡Z n‡e
- Av`Zv†ivaK †gvUv cwjw_‡bI exR msi ¶Y Kiv †h‡Z cv‡i
- †iv‡` ïKv‡bv exR VvÛv K‡i cv‡Î fi‡Z n‡e
- cÿiv cvÎwU exR w`‡q f‡i ivL‡Z n‡e | hw` ex‡R cvÎ bv f‡i Z‡e ex‡Ri Dci KvMR wewQ‡q Zvi Dci ïK‡bv evwj w`‡q cvÎ cwicY-Ki‡Z n‡e
- cv‡Îi gÿ fvj fv‡e eÜ Ki‡Z n‡e †hb evZvm XÿK‡Z bv c‡i
- Ggb RvqMvq exR ivL‡Z n‡e †hb cv‡Îi Zjv gvwUi ms¯ú‡k bv Av‡m
- cwZ gY av‡b 120 Mvg wbg, wbwk›`v ev wekKvUvwji cvZvi ¸ÿtov wgwk‡q †MvjvRvZ Ki‡j †cvKvi Avµ gY nq bv |

25.7 exR av‡bi AsK‡ziv`Mg ¶gZv 80% ev Zvi †ewk n‡Z n‡e †Kb ?

Dchy³ cwi‡e‡k ex‡Ri åæY †_‡K †h c‡qvRbxq Ask AsKwiZ I ewaZ n‡q GKwU ¯vfweK Pvivi mÿó i BswMZ †`q Zv‡K AsK‡ziv`Mg e‡j Ges ex‡Ri AsKwiZ nIqvi ¶gZv‡K ex‡Ri AsK‡ziv`Mg ¶gZv e‡j | fvj ex‡Ri Rb¨ AsK‡ziv`Mg ¶gZv 80% ev Zvi †ewk n‡Z n‡e |

e¨e¯vcbv

- ex‡Ri mwVKgvb eRvq Av‡Q Kx bv A_vr exR †_‡K mÿv Pvivi gva¨‡g ¯vfweK Mv‡Q cwiYZ n‡e Kx bv Zv Rvbvi Rb¨ ex‡Ri AsK‡ziv`Mg ¶gZv Rvbv we‡kl c‡qvRb
- ex‡Ri 80% AsK‡ziv`Mg ¶gZv, gvbm¤úb ex‡Ri GKwU cavb ˆewkó¨ | ex†R AšZ 80% AsK‡ziv`Mg ¶gZv bv _vK‡j Zv‡K fvj exR ejv nq bv, GgbwK Zv exR wnmv‡e MY¨ Kiv nq bv

AsK‡ziv`Mg ¶gZv 80% Gi wb‡Pi exR e¨envi Ki‡jt

- c‡qvRbxq msL¨K Pviv cvIqv hvq bv
- mÿ mej Pviv Drcvw`Z nq bv
- dmj †ewk †ivMvµvš nq Ges djb K‡g hvq |

25.8 fvj exR †Kv_vq, Kx fv‡e cvIqv hv†e?

fvj ex‡R fvj dmj | dmj Drcv`b eÿ×i gÿ DcKiYB n‡"Q DbZgv‡bi exR | gvb m¤úb fvj exR e¨env‡ii gva¨‡g av‡bi djb 10-15% eÿ× Kiv m¤e | †`‡ki †gvU exR Pvwn`vi gvÎ 20% DbZgv‡bi exR miKvwi I †emiKvwi ms¯v KZÿK mieivn Kiv n‡q _v‡K | Gi g‡a¨ miKvwi e¨e¯vcbvq weGwWwm 10% exR mieivn K‡i _v‡K | †ewk dj‡bi Rb¨ fvj exR e¨envi Kiv Riæwi |

Dcvqmgn-

- weGwWwmi mKj †iwRóvW jvB‡mÝcvß wWjvi‡`i wbKU †_‡K exR msMn Kiæb | mviv †`‡k Zv‡`i wWjvi wb‡qvwRZ Av‡Q |
- wewfb †emiKvwi cwZôvb we †_‡K weWvi mxW wb‡q fvj exR Drcv`b K‡i _v‡K | Gme cwZôvb †_‡KI exR msMn Kiv †h‡Z cv‡i | D‡jL‡hvM¨ cwZôvb ¸‡jv nj- e¨vK, c`‡¶c, hgÿv Mæc, nxW (evsjv‡`k), cwkKv, AviwWAviGm, mÿkxjb, wmb‡R›Uv (evsjv‡`k), GbwRc¨vK G‡Mv, mÿcxg mxW †Kv¤úvbx, GwmAvB wjt, bvBKj, †MU‡Kv, G‡Mv wfkb, Kwlwe` wmW wjwg‡UW, B¯úvnvwb G‡Mv, b_-mvD_ mxW, mRvM, cvwRqv mgvR Kj¨vb ms¯v BZ¨vw` |
- ZvQvov, e¨w³ MZ D‡`¨v‡M K‡qKkZ ms¯v we †_‡K weWvi mxW wb‡q av‡bi exR Drcv`b K‡i _v‡K | Zv‡`i mv‡_ †hvMv‡hvM

fvj ex‡R AwaK djb