

2.6 vdk"B ou mi t

fogxkoykdu

fo"K; oLr| v/khu miyfc/k; k dk l kjk'k

o"K d nkjku vdk"B ou mit ij vuLU/kkuk dk cM ieku ij doj fd;k x;k gA dUn.k itkfr;k d l j{k.k} /kkj.kh; rFkk vfouk'kd kjh dVkb i.kkfy;k] dVkb lk'pkr d mipkj rFkk ifØ;k rduhd] tolfØ;rk eY;kdu] ikdfrd itkfr;k d lkFk ou lef) d }kjk l lk/ku fodkl] txyh [kk]k dh jklk;fud : ij [kk xkn rFkk vU; ykHknk; d vdk"B ou mRikn ij fd;k x;kA tVQk djd l d fofHkUu ikfou l rFkk Dykuk d cgLFkkfud ijh{k.kk] vkuokf'kdh l/kkj dk;] lokUke Dykuk rFkk ckl pkjdy rFkk o{k tfur ry ch tk l fgr to b/ku ij fofHkUu dk; Hkk-ok-v-f'k-lk- d LkLFkkuk }kjk fd;k x;kA ifj{kdk d lkFk dk"B rFkk ckl d mipkj ij dk; ikjEHk fd;k x;k gA vdk"B ou mRikn okyh itkfr;k dh [krh] io/ku] tul [k vkdyu rFkk db vk"/kh; iknik d lokUke dhekvkbi l dh igpku ikjEHk dh xbA

fo"K; d rgr ifj;k tuk, i

ifj;k tuk, i	i.k dh xbi ifj;k tuk, i	tkjh ifj;k tuk, i	o"K d nkjku ubi ikjHk dh xbi ifj;k tuk, i
lyku	12	26	22
ck°; l gk; rk iklr	6	9	5
diy	18	35	27

2-6-2 vdk"B ou mi t dk l lk/ku fodkl

ikbij iMh l hyVe dk mi; kx djr; g, vdk"B ou mit dk c<ku d fy, LFky ijh{k.kk ikbij iMh l hyVe tk ikdfrd : lk l ueh oky m".kdfVcU/kh; rFkk v/k&m".kdfVcU/kh; ou {k=k e mxrk g e] ou mRikndrk dk c<ku d fy, ykHkdkjh : lk l mi; kx gku dk lkFk gA bl txyh itkfr dk ikyr cukrk rFkk [krh djuk

lEHko gA vr% ngjknu {k= e LFky ijh{k.k fd;k x; gA ik/k'kkyk rduhd fodflr rFkk ekudhdr dh xb gA LFky ijh{k.kk d fy, 2 LFky iul fl; jklkbml jki.k ou vuLU/kku lLFkku ifjlj rFkk MYcft; k flll jki.k] ngjknu d v/khu yPNhokyk vkj-, Q- {k= dk p; fur fd;k x;k gA [kr e vfre jki.k dk; d fy, r; kjh dj yh xb gA



okuLifrd io/ku rFkk vdk mRiknu



Hkk-ok-v-f'k-i- d: lLFkkuk }kjk vk"kh;
rFkk lxfu/kr iknik e: vkj ,.M Mh rFkk
Hkk-ok-v-f'k-i- }kjk fuf/k;hr vU; lLFkkRed
ifj;k tukvk dk vkdMk ldyu% vk"kh; rFkk
lxfu/kr ikni d lDVj d fofHkUuk igyv k ij bl
o" k cgr l k j h l p u k , i k l r d h x b g g k y k f d ; g
l p u k Q y t k r h g r F k k i ' k l k R e d m Y y [k r d u g h
i g p i k r h g r F k k d k ; k d i f r f y f i d j . k d h H k h
l E H k k o u k j g r h g A o g i j h r j g l i . k / k k f j ; k r d
i p k f j r u g h g r h A v r % f o f H k U u v u l / k k u d k ; Ø e k
d v / k h u i k l r f d ; x ; v k d M k d k l d y u
i . k / k k f j ; k e i p k f j r d j u d v r f j D r l y H k l n H k
d : l k e b l d v u i ; k x] u b i f j ; k t u k v k d h
; k t u k c u k u e b l d m k ; k x d f y , f d ; k x ; k g A
f i N y 5 0 o " k k d f y , H k k - o k - v - f ' k - i - f u f / k ; h r v f r e
: l k i k l r i f j ; k t u k v k d i f r o n u k d h t k p r F k k H k k -
o k - v - f ' k - i - d l L F k k u k } k j k e i l e v k j , . M M h i j
i L r d k y ; [k k t i j d k ; f d ; x ; A n k t v k j , Q
d k l f Ø ; : l k l b l d k ; d j y x k f n ; k g A
f g e k y ; u o u v u l / k k u l L F k k u] f ' k e y k] ' k " d o u
v u l / k k u l L F k k u] t k / k i j e v k j , . M M h v k d M k
, d = h d j . k d f y , L F k y n k j k f d ; k x ; k A i j k e ' k
i k l r i f j ; k t u k i . k r k i f r o n u ¼ l - 4 6 ½ v u l U / k k u i =
¼ l - 4 4 ½ r F k k 3 6 v k " k / k h ; i k n i k i j v k j , . M M h
l p u k d k v / ; ; u i x f r i j g A

mÜkj[k.M d: p;fur 0;kikfjd :lk l: mxk; ;
x; ; vk"kh; iknik dk 'k"du rFkk Hk.Mkj.k
ikVkdKy dk ekudhdj.k rFkk x.koÜkk
vkdyu% x.koÜkk mRiknk dk iklr dju d fy,
, dkuhVe gVhfj; kQkbye] foFkkfu; k lkeuhQjk]
, Lijx l j lhek l l] fidjkjgh t k d j k v k] r F k k
j k o k f Y Q ; k l i U V h u k d v u d y r e ' k " d u r F k k
H k . M k j . k v o L F k k v k d k e k u d h d r f d ; k x ; k A
p ; f u r m x k ; x , v k " k / k h ; i k n i k d h x . k o r k i j
' k " d u r F k k H k . M k j . k v o L F k k v k d i H k k o d k e Y ; k d u
d j u d f y , d k ; f d ; k x ; k g A f d l k u k r F k k
0 ; k i k f j ; k d f y , ' k " d u r F k k H k . M k j . k i d t
f o d f l r d j u d f y , H k h v u l U / k k u f d ; k x ; k g A

o" k d n k j k u [k r h v / k h u i k p v k " k / k h ; i k n i k
d ' k " d u r F k k H k . M k j . k e i ; k x k R E k d v U r j n [k x ;

rFkk x.koÜkk ijhehVj t l , yvkmh] dy jk[k] vEy
v?kyu'khy jk[k] ty rFkk ,Ydkgy e ?kyu'khy
l Rok d HkMkj.k d 18 eghuk rd vkdfyr fd; k
x; kA iR; d i t k f r d f y , f o f ' k " V j k l k ; f u d e k d j
f o f H k U u H k . M k j . k v r j k y k i j v k d f y r f d ; x ; A
i f j ; k t u k v f r e p j . k i j g A

ck l l / k k j d : l e f d r n f " V d k . k d : v / k h u
f o f H k U u d k ; t l c k l l j { k . k] p ; f u r c k l i t k f r ; k
d d f " k o k f u d h e k M y k d k i o / k u , o f o d k l] d k " B
f o K k u , o i k | k f x d h l L F k k u] c x y : e f d , x ; A
p ; f u r c k l i t k f r ; k d l h i h l h , l l v k Q l V
d y e @ i k n i , d f = r f d ; x , A 9 l h i h l h , l] l f g r
t u u n 0 ; c d] x k V h i j k e 1 6 f o f H k U u c k l i t k f r ; k
j k f i r d h x b A M U M k d y e l c f U M l h e : f v x i j
V k b i k d i H k k o i j i ; k x f d ; x , A ¼ u k y d f v x]
' k k [k k d f v x r F k k j k b t k e V l d f v x ½ j k b t k e V l
d f v x r F k k u k y d f v x e Y k R i f r d f y , m Ü k e
l k f c r g b A g k l d k v e d k y p u] Q h Y M c h u r F k k
d k v k i h d l k F k M h o k u j k i . k e M h] d k i k]
f p d e x y j f t y k r F k k c h r u x k y k] f o j k t i V] d x e
v U r j Q l y f d ; k x ; k A M U M k d y e l c U M f l l h e
e Y ; k R i f r f o f H k U u v k d j k d i H k k o ¼ c M k] e / ; e]
N k V k ½ r F k k d y e k d i d k j k ¼ ' k k [k k d y e k r F k k
j k b t k e V l d y e k ½ i j v / ; ; u f d ; x , A f o f H k U u
o f) g k j e k u l t l v k b c h ,] , u , ,] v k b , , r F k k
, u v k , d k i j [k k x ; k A v k j F E H k d i f j . k k e k u l f p r
f d ; k f d e Y ; k R i f r c M v k d j d j k b t k e V l d y e k
e m Ü k e F k h r F k k o f) g k j e k u v k b c h , r F k k , u , , u
e Y ; k R i f r i f r ' k r r k d k c < k ; k A f p d e x y j r F k k
d k M k x e M h o k u j k i . k e u ; k d f " k o k f u d h i j h { k . k
L F k k f i r f d ; k x ; k A o f) i j k e h V j k i j i c U / k u r F k k
v o y k d u v f H k f y f [k r f d ; x , A y h Q f y V j V i l V
f d ; x , r F k k m R i k n d r k v / ; ; u d f y , u k y y e
f y V j ¼ d M k ½ v i ? k V u i j h { k . k L F k k f i r f d ; k x ; k r F k k
e k f l d i { k . k v f H k f y f [k r f d ; x , A

ck l r F k k m R i k n k d k j { k . k % t o f x j k o V] i k / k ' k k y k
e d h V r F k k j x] j k i . k] c h t r F k k u k y H k . M k j . k] c k l
m i t] f V d k Ä i u r F k k l e f d r d h V @ j k x i c U / k u i j
i ; k x c x y k j e f d ; x , g A m x k ; x ; c k l k l



lEcFu/kr dhV rFkk jkx ij lo{k.k fd; x;A e[; ckI itkfr;k ;Fkk& cEcIk cEcI] ch-U;VuI] ch-ckYdvk] ch- ikyhMk] ch- VYMk] MUMkdyeI ,Lij] Mh- cUMhIh] Mh-gfeyVkuh] Mh- LVkdIh] Mh- fLVdVl rFkk xvkMvk ,uXLVhQkfy;k ij vl;;u fd;kA dhVke jlp"kd rFkk fu"i=d Hkh lfeefyr FkA ckI dh fofHkUu itkfr;k ij ,fQM rFkk MYi,fIMI e[; dhV FkA jkxxLr ckI dh ifUk;k ,df=r dh xb rFkk dod dh dYpfjx dh xBA fuEufyf[kr jkxtudk dk iFkd fd;k x;k rFkk igpku x,] iLVkyhvkiflI X;fiiuh ¼MLE½ LV ch- cEcIk iUk ij nkx Mkyrk] ¶;lfj;e itkfr] ,Q- bDohIVh ¼dkjMk½ Id tk Mh- ,Lije iUkk lØe.k djrk g] fl;MkfQj;e tk Mh-LVkdIh ij iUkk ij nkx Mkyrk gA fuEufyf[kr uk'khdhV igpku x, rFkk tfod vl;;u fd; x,A Mh- cMhIh e ,yhfe;k itkfr] VlhjhvkVkek tokuk] ijkfgrk itkfr] ch- ckYdvk e I;Mkjhxek cEcIhdkyk rFkk xueiVkyek ,oUVhjvkv] Mh- fLVdV e ,e- ukVchVI] ,LVhxklVkj,DI cEcIk] ijkfgrk itkfr] ch- cEcIk e ,LVhxklVkj,DI cEcIk] ekfjfy;k itkfr] ekVvik vdfb;k rFkk Mh- gfeyVkuh e ,yekIhdjhtjka eVkjghft;e itkfr ij okuLifrd i;kx fd;k x;kA ,LVhxklVjDI cEcIk rFkk dkdhuYk lIveiudVkvk d lFk iVVkj {kerk i;kx fd;k x;kA ch- cEcIk rFkk Mh-LVkdIh d mipkfjr dhVuk'kd@ifjj{k d ouLifr dk i;kx'kkyk rFkk LFky voLFkvvk d v/khu fvdAiu d fy, eY;kfdr fd;k x;kA if)r;k tI f}&dYpj ijh{k.k rFkk ifjoru'khy rFkk vijjoru'khy ;kfxdk d mRiknu dk viuk dj 6 VkbdkMek itkfr dk jkxtudk d fo:/k ¼¶;tfj;e vkDIhLikje] ,Q- oVhflykvkBMl] iLVkykvkvkiflI itkfr RkFkk fMLYjk itkfr½ ik= e ijhf{kr fd;k x;kA 'kV dod@Nnd rFkk nhedk d fo:) fvdAiu ijh{k.k d fy, ncko mipkj }kjk Mh- ,Lij] Mh- LVkdIh] Mh- fLVdVl] ch- ikyhMk] ch- ckyrvk rFkk ch- U;VuI dk ikIkiI

bl dh 1 l 2% ?kurk rFkk LyhvkBVkuFkI dkyhuI dh Nky d jI d lFk ijhf{kr fd;k x;kA ch- ckYdvk rFkk ch- ikyhMk d ikdfrd fvdAiu dk nk lQn jkV rFkk Hkj jkV QxI d fo:/k ijhf{kr fd;k x;kA Hkkjr e ckI ij jkx rFkk dhVke dh tkp lph r;kj dh xBA fofHkUu i;kxk ij vkdM ldfyr fd; x; rFkk fjiKV r;kjh v/khu gA

ckI dk l'kk"K.k rFkk ifjj{k.k ekbØkoo dk fofHkUu ekbØkoo rhork rFkk vukoj.k le;k e mi;kx dj d ckI d 'k"du ¼Mh- LVkdIh rFkk Mh- fLVdVl½ ij i;kx ij fd; x;A cEcIk cEc d vkikd 'k"du rFkk ekbØkoo 'k"du ij i;kx fd; x;A ckI dh yEckb ¼Mh- LVkdIh½ d lFk fofHkUu mipkj ijkehVj ij ifjj{k d vo'kk"K.k ij fo'y"K.k ij k fd;k x;kA Mh- fLVdVl e ifjj{k d vo'kk"K.k dk fo'y"K.k fd;k x;kA ifj.kke u n'kk;k fd ifjj{k dk dk ifr/kkj.k egROI.k :lk l ,eMCY; 'k"du e vkikd rFkk gok 'k"du l mPpre FkA ,d 'kk/ki= fo"K; bckI dk ekbØkoo 'k"duB dk"B rFkk dk"B mit d ;jkih; tuYk e idkf'kr gvka

p;fur ckI itkfr;k l: pkjdky d bi/ku xI.k] dkcuhdj.k rFkk y{k.k o.ku% ;g n[kk x;k fd pkj ckI itkfr;k ey ?kurk 0-48 ± 0-03 l 0-61 ± 0-03 bldk eY; ch- cEcIk e mPpre ¼0-61 ± 0-03½ ik;k x;kA cEcIk ckYdvk dk vk; ¼1 l 4 o"K½ rFkk Åpkb ¼'kh"K] e/;e] ryk½ d lFk ,yeUVy fo'y"K.k ¼dy dku] gkbMktu] vkDIh tu rFkk lYQj rRok dk fu/kkj.k½ fd;k x;kA pkj ckI itkfr;k dk vk lUu fo'ky"K.k fd;k x;kA ch-cEcIk dh jk[k ifr'krk] Mh- fLVdVl dh mPpre jk[k ¼3-02 ± 0-03½ dh ryuk e cgr de ¼1-41 ± 0-002½ ikb xBA fofHkUu ckI itkfr;k e fu/kkfjr dku jt 17-61 l 18-14 ifr'kr gkrh gA vkDIh tu ckEc dykjhehVj dk i;kx djr g, pkj ckI itkfr;k dh dykjhehVj eY; fu/kkfjr dh xBA mPpre dykjhehVj eY; ¼4496 ± 0-04 kcal/kg½ ch-cEcIk rFkk fuEure Mh- fLVdVl e ¼4496 ± 0-02



kcal/kg^{1/2} i kb xBA nk ck l i t kfr ; k dh Dykj kQd eY; e fofHkUrk jk[k rRok e fofHkUrk d dkj.k gA p;fur ck l i t kfr ; k dk FkekxohvFjd fo'y" k.k fd ; k x ; kA fofHkUu dkcuhr voLFkkvk %rkieku] m"e.k nj rFkk vo'kk" k.k le ; % e pkjd ky dh r ; kjh ixfr v/khu gA pkj p ; fur ck l i t kfr ; k dk jk[k rRo fo'y" k.k fd ; k x ; kA lckg ; pkjd ky cuku oky vkikd dk Qcjhd'ku dju dk vkn'k fn ; k x ; k gA

ck l l /kkj i o /ku] df'k okfudh ekMy] j{k.k] i : l i Ldj .k rFkk mi ; kx% Bmipkfjr ck l yVBk dh j l foLFkku if) r p ij , d ipkj i fLrdk dUUKM rFkk vxth e idkf'kr gbA bl ij vk ; k [kp gkykfd if'k{k.k [kp d v/khu cd fd ; k x ; kA puky dfVx d }kj k MUMkdye/ LVkD/ h dh <kpRed vko' ; drk rFkk ouLifrd io/kuB ij , d ipkj i fLrdk r ; kj dh xBA ck l rFkk l LFkku fØ ; k dykik iR ; d ij yxHx 15 feuV dh fofM ; k fQYe r ; kj dh xBA dukVd] vku/kin'k rFkk djy d dk ; ; ktuk d vul kj 19 in'ku dk ; Øe vk ; kft r fd ; x , A pck l io/ku] icU/ku rFkk dk ; ; ktuk e oreku mUufrB ij dk"B foKku , o ik | kfxdh l LFkku }kj k 17 l 18 Qjoh 2011 dk , d jk"Vh ; lehukj vk ; kft r fd ; k x ; kA

of) rFkk mit ij mojd vuji ; kx dk i Hkko% f l YohiLVkjy r = d v/khu l YokMkj i l hdk rFkk , df'k ; k , Eiyh l l l jki .k nkuk n l o"kh ;] vkQjh] t k /kij e "k" d yo .k i Hkfor enk e mxk ; k t k jgk gA t k /kij 1997 rFkk 1998 e {k=h ; [kkjh enk e l YokMkj i l hdk rFkk , df'k ; k , Eiyh l l l d LFky ij h{k.k fd ; x ; A , l - i l hdk d fo"k ; e 13 mipkj ; Fkk]&1. fu ; = .k ; 2. FYM (10Kg/plant); 3. FYM+ Urea (500 g N) 4. FYM + ZnSO₄ (25 kg/ha) 5. FYM + K₂SO₄ (50 g K₂O) 6. FYM + SSP (500 g P) 7. FYM + Urea + ZnSO₄ , 8. FYM + Urea + K₂SO₄ 9. FYM + Urea + SSP , 10. FYM + ZnSO₄ + K₂SO₄ 11. FYM + ZnSO₄ + SSP , 12. FYM + K₂SO₄ + SSP 13. FYM + K₂SO₄ + SSP + Urea + ZnSO₄ RkFkk

, df'k ; k , Eiyh l l l d fo"k ; e 10 mipkj ; Fkk]&1. fu ; = .k ; 2. FYM (10 Kg/plant); 3. Urea (500 g N) 4. SSP (500 g P) 5. ZnSO₄ (25kg/ha); 6. K₂SO₄ (50 g K₂O) 7. FYM + Urea 8. FYM + ZnSO₄ 9. FYM + K₂SO₄ 10. FYM + SSP of) rFkk mit ij mojd mipkj dk i Hkko ij v/ ; ; u d fy , tuo jh 2009 e fd ; x , A

l YokMkj i l hdk

ekulu d de gku d ckn viy 2010 e Qy mit T₁₃ (FYM+U+Zn+K+SSP) mipkj e vf/kdre 971g^{1/2} rFkk bld lk'pkr T₄ (FYM+Zn) 681g rFkk T₇ (U+Zn) 670g FkhA vU ; mipkj e fcuk Qy mit d T₆ (FYM+SSP) rFkk T₁₀ (FYM+Zn+K) mipkj d l kFk mit 20 l 123g rd FkhA ry mit dk vkdyu fd ; k x ; k rFkk xykch Qyk d ch t k dh mit de l de 37-5% Fkh



Qyu voLFkk e l YokMkj i f l dk



tcf d cxuh rFkk lQn dh mit Øe'k 40-8 rFkk 39-6% FkhA mipkj d iHkko d fcuk ry mit 30-5 l ydj 43-1% rd FkhA fQukykft dy vkdyu 2010 e vfHkfyf[kr fd; x; rFkk 93-6% iknik e i.k i"i.k nj vDVcj e n[kk x; kA vf/kdk'k cgjxh Qy n[k x; gkykfd N iknik e doy lQn Qy n[k x; A fcuk ch tk oky vifjiDo Qy cu] iju [kjc gk x; rFkk i"i.k 'k: fnlEcj e ikjEHk gvKA dy 93-1% o{k Qjoj 2011 e n l jh ckj if'ir g, A Qy ink gku dh ifØ; k ekp e 'k: gbA

o" 2009&10 d fy, okf'kd of) vkdMk u lfpr fd; k fd mipkj fu;=.k dh ryuk e egROI.k : lk l ¼P-0-00½ Åpkb] 'kh" k] rFkk dkyj 0; k l dk iHkfor dj jg gA T₁₂ ruk m l d lk'pkr T₄ (FYM+Zn) 7.8, 26.5 rFkk 35.3 vf/kdre dy of) dk vfHkfyf[kr djr g, Øe'k 13.6, 26.6 rFkk 40.1% Åpkb] 'kh" k] rFkk dkyj 0; k l d fy, lokre mipkj FkKA

, df'k; k , Eiyh l l l

, d lgh : lk l forfjr ekulu o" e 72-5% iknik e Qyh lfVx e , -, Eiyh l l l e io i"i.k n[kk x; k vkj 90% o{k uoEcj 2010 d igy g l r e if'ir gk x, rFkk tuo jh 2011 rd if'ir t k fd 2009 e fcuk Qyh lfVx d 45% i"i.k dh ryuk e mÙke FkKA 1 ekp 2011 e vf/kdre Qyh lfVx T₇ (91.6%) m l d lk'pkr T₆ 88.8% rFkk fuÈure (44.4%) fu;f=r e FkKA

de ekulu d lk'pkr] , -, Eiyh l l l u xfe; k 2010 d nkjku fofHku mipkj e 18% vk l r eR; rk n[kh xBA c<h gb o{k of) u fn[kk; k fd T₆ (32.2 & 34.2 %) , T₈ (31.4& 36.3%) rFkk T₁₀ (26.4& 29.4%) u Øe'k vf/kdre dkyj rFkk 'kh" k] 0; k l vfHkfyf[kr fd; kA gkykfd T₁₀ (37.1%) m l d lk'pkr T₉ (28.8%) rFkk T₈ (25.8%) mipkj d fy, Åpkb of) vf/kdre FkhA

?kk l ijh{k.k

rhu enk <kpk i) mBk gvk lery LFkku ii) mBh gb eM rFkk iii) rhu ifrdfr; k e flYohiLVkjy

vd k"B ou mi t

v/; ; u d fy, fu;f=r e nk ?kk l i tkfr; k ; Fkk& l p j l f l y h, f j l r F k k L i k j k c k y l M h, U M j d l k F k L F k y i j h { k . k f d ; x ; A

, d vPN ekulu o" k e] enk <kp u gjh ?kk l mit dk iHkfor fd; k rFkk ; g lery rFkk <yku oky <kpk d fy, Øe'k 906 rFkk 894 xk@eh² fu;f=r ¼465 xk@eh²½ e , l- Mh, Unj dh ryuk e FkKA l h- f l y h, f j l d f o " k ; e] 1104 xk@eh² d l k F k <yku l c l mÙke <kpk Fk r F k k m i t f u ; f = r ¼169 xk@eh²½ l 6-5 vf/kd Fkh] u y h f p x d l d k j k R e d i H k k o d h v k j l d r f d ; k A



1-lyVQke



2- fu;=.k
L i k j k c k y l M h, U M j



1-ky



2- fu;=.k
lUpjl flfy,fjl

ikMkQkbye gDIUM'e % fgeky in'k rFkk tEe d'ehj %ynn[k ?kkVh½ d lokRd"V dhekVkbik dh igpku rFkk itkfr;k dk ,DI&IhV Ij{k.k fd;k t k jgk gA fgeky in'k % ,pih½ rFkk tEe d'ehj %t ,.M d½ dh fofHkUu Hkkxkfyd LFkkuk I ikMkQkbye gDIUMe itkfr;k d ,d=hdj.k d fy, ogn lo{k.k d 28 LFky vfHkKkr fd;k x;A ekbØk gchVV d y{k.k o.ku lfrgr iR;d LFky



dkjfy %ynn[k tEe o d'ehj e
ikMkQkbye gDIUMe ij v/;u

Hk lnhHkr FkkA ikMkQkbye gDIUMe d ueu p;fur LFkyk I ,df=r fd;k x; rFkk lokRd"B dhekVkbik dh igpku d fy, ,@vkb fo'y"n.k % lfØ; rRok½ dju d fy, fgeky;u to&llkku ik lfxdh lLFku %vkb,pchVh½ ikyeij Hk tk x;kA 34 LFkyk e ,df=r tuu n0; dk mi;kx djr g, LFky vul/kku LV'ku] cu/kj rFkk txrl [k] ftyk dYy] fgeky in'k % ,pih½ e ,Qthch %LFky thu cd½ LFkkfir fd;k x;k gA ih- gDIUMe d miHkkDrk fe= io/ku ijh{k.k dk fodflr dju d fy, fct rFkk okulifrd io/ku ijh{k.k ikjEHk fd;k x;A ueuk d ,@vkb fo'y"n.k d lk'pkr fgeky in'k rFkk tEe d'ehj d %ynn[k ?kkVh½ lcl mi;Dr Hkkxkfyd LFkkuk I lokRd"V dhek Vkbil dh igpku d fy, vkdMk dk lfk; d : lk l fo'yf"kr fd;k x;kA

fidkjgh tk d; vk rFkk oyhfj;kuk tVkeulh % f'keyk e mÜkj&if'peh fgeky;k %fg-i- rFkk mÜkj[k.M½ l fofHkUu tul[;kvk dh tkp d }kjk fidkjgh tk d : vk jk;y ,DI cUfk rFkk oyhfj;kuk tVkeulh dh lokRd"V vkuof'kd LVkd dh igpku rFkk tul[;k vkdyu fd;k x;kA lcf/kr nyk d }kjk lcl lHkkfor LFkyk ;Fkk&



pEck %fg-i-½ ei ih- d: vk dk ,d LFky

jkeij] f'keyk] pEck] /ke'kkyk] dYy] ukgu RkFkk fgeky in'k d eMh ou pØ dk doj djr g,] LFkyk dk p;u dju d fy, ogn lo{k.k fd; x;A LFkyk dk Hk&lnfHkr fd;k x;k ekbØk gchVV d y{k.k o.ku d lkFk tul[;k vkdyu v/;;u fd;k x;kA lokRd"V vkuokf'kd LVkd dh igpku dju d fy, ,@vkb fo'ky" k.k dju d fy, vk" k/kh; ikni ueu ,df=r fd; x; %ih- d: vk&81 rFkk oh- tVkeu/h&40% A vk" k/kh; iknik ueuk d ,@vkb fo'y" k.k d fy, fgeky;u to l lk/ku ik|kfxdh lLFkku %vkb,pchVh½ ikyuij] ftyk d kxMk %ih- d: vk&75 rFkk oh- tVkeu/h&84% rFkk t; idk'k ukjk;.k lpuk ik|kfxdh fo'o fo|ky;] ftyk lkyu] oduk?kkv %ih- d: vk&74% Hk t x;A LFky thu cd LFkkiuk d fy, f'kyk: rFkk cu/kkj ik/k'kkyk e LFky D;kfj;k r;kj dh xb gA ,Q-vkj- ,l- f'kyh] f'kyk: rFkk ou/kj ik/k'kkyk e ektnk LVUl dk ikf"kr fd;k x;kA

vdk"B ou mit k dk mit v/;;u% vkb,Qih] jkph }jk o" d nkjku >kj[k.M d dchy;k;h LFkyk e vdk"B ou mit k d ,d=h d j.k dk rjhd k] i lldj.k] foØ; rFkk mi;kx d rjhd ij lo{k.k ijk fd;k x;k rFkk vdk"B ou mit d 320 ueu v/;;u fd;k x; rFkk fofHkuU ckt kjk l vk" k/kh; cfV;k

,df=r dh xbA ioh l Hkx e vk" k/kh; iknik d vkifdrkvk dh ,d lxfBr lph r;kj dh xb gA vk" k/kh; iknik dk l j{k.k% ioh fgeky; e l;Dr ou ic/ku lfefr@ipk;r k rFkk fd lkuk }jk 0;kikfjd [krh rFkk eY; o/ku rFkk bld lkeftd vkfFkd iHkko ij v/;;u tkjh gA dy ink fd; x; D;ih,e 280483 rFkk l;Dr ou icU/ku lfefr lnL;k dk 77200 D;ih,e jkT; ou foHkxk rFkk fd lkuk dk 0;kikfjd [krh d fy, e r ckV x; rkfd fd lkuk [krh d fy, ikRlkfgr gkA ^ 1-00@& dh fuEure nj ij 0;kikfjd [krh d fy, fd lkuk dk 43800 D;ih,e fn; x; rFkk 30950 D;ih,e] cht ckxku] mn; flg tkFk rFkk vkb,Qih] jkph] ykyxvok rFkk ijh{k.k Hk[k.k Mk e mi;kx fd; x;A ,uVh,Qih iHkx] mUkj cxky] foHkxh; ou vf/kdkjh d }jk vk" k/kh; iknik d 0;kikfjd [krh d fy, lkr dk;'kkyk,@if'k{k.k dk;Øe vk;kftr fd; x; rFkk exydkVv xke] cujgV(vxjkcklk xkeipk;r] tyikbxMh ftyk(fyxl xke] dfyeix mi&iHkx] nktfyx ftyk(jxHkx xke] nktftx ftyk e 113 fd lkuk dk ikRlkfgr fd;k x;kA le; le; ij [krhdrk dk rdudh lgk;r k miyC/k djokb xb] vk" k/kh; iknik dh 6 itkfr;k ;Fkk& jkoykQ;k l iUVhuk] foFkke;k l keuhQjk] LVhfo;k jhckfM;kuk] ,likjxl j lhek l l] fteuhek l yoLVh rFkk ,ckyekLpkÅ ekLpkVl d 10 ijh{k.k jki.k r;kj fd; x; rFkk ik" k.k fd;k x;kA

,DI&l hV [krh dk ikRlkfgr dju d fy, D;ih,e d l j{k.k rFkk mRiknu d fy, NkVukxij iBkj e vk" k/kh; ikni ckxku rFkk o/ku dUn LFkkfir fd; x; t gk 300 D;kfj;k e 20 fofHkuU itkfr;k dk jkfir fd;k x;k rFkk ,d yk[k nl gt kj vdj@mRiUu fd; x; rFkk forfjr fd; x;A vk" k/kh; iknik ij ,d jk"Vh; l eeyu ou mRikndrk lLFkku] jkph }jk Hkx vk;kftr fd;k x;kA



[krh rFkk foi.ku% >kj[k.M] fcgkj] if'pe cxky rFkk mMh l k d n l p;fur vk''k/kh; iknik d i/kku l fØ; RkRok d lEcU/k e ,d i.k idt dk ipkj rFkk ekudhdj.k fd;k x;kA vk''k/kh; iknik ij vk/kkfjr dEifu;k rd igpk x;k rFkk vf/kdre u vkdM iLrr fd; tk mul ekx x,A i;kxkRed ijh{k.k d fy, vdj r;kj fd; x;A [kyh rFkk ,xkuV volFkkvk e nk jkT;k t l >kj[k.M rFkk if'pe cxky e i;kxkRed Hk[k.M n[k x;A bvkj, l] lduk e p;fur vk''k/kh; iknik ij ,d tkx: drk if'k{k.k vk;kftr fd;k x;k rFkk p;fur vk''k/kh; iknik dh [krh dk iDVhdy in'ku fd l kuk rFkk xj l jdkjh lxBuk bR;kfn dk fn;k x;kA

ik/k'kkyk rduhd% mPp 'kkf''kr vk''k/kh; ikni flykLVI iuhdyVI rFkk ohVDI iMudykfjl dh ik/k'kkyk rduhd ikjEHk dh xBA jkph e foVDI iMudykfjl dh 3 ikdfrd LFkyk dh rFkk jkex< e flykLVI iuhdyVI d nk LFkyk dh igpku dh xBA oh- iMudykfjl d rhu o{k rFkk l h- iuhdyVI dk ,d ikni LoLFk] rth l mxu oky itudk d l kFk p;fur fd; x;A oh- iMudykfjl l ijkg dye ikr dh xBA l h- iuhdyVI d ifjiDo cht ,df=r fd; x; rFkk vdj.k i; kxk d fy, fofHkUu Hkkfrrd jklk;fud i; kxk d v/khu fd; x;A

cgLFkkfud ijh{k.k fofHkUu df''k&tyok;oh; {k=k e tVQk dk cgLFkkfud ijh{k.k rFkk df''k 'kk l h; dk;i.kkfy;k dk v/;;u ikjEHk fd;k x;kA gnjkckn]bnkj rFkk y[kuÅ l jki.k l kexh ,df=r dh xBA df''k 'kk l h; ijh{k.k ,e,yVh ijh{k.k rFkk lo/ku ijh{k.k fd; x;A flpkb 0;oLFkk] eR;rk ifrLFkkiu rFkk nhd uk'd vui;kx LFkkfir fd; x; rFkk [krk e ik/kk dk ik''k.k fd;k x;kA

2-6-3- /kkj.kh; Q l y dVku rFkk iC/ku

cht mRikndrk {k= dh jpuk rFkk ;ijkfj;k fidVk d; 0;kikfjd jki.k ijh{k.k cVh n'keyk ikni] ;jff;k fidVk] tk fd txy l ,df=r fd;k x;k g] ft l dh tul[;k ikdfrd ou {k=k e l dV dh fLFkfr e tk jgh gA Hkfo"; e bldh miyC/krk nko ij yxh g tc rd bl jf{kr rFkk l jf{kr ugh fd;k tkrkA vr% cht cd] i;kxkRed [krh rFkk bldh [krh ij vFk0;oLFkk dk vkdyu çkjEHk fd;k x;k gA

o''k d nkjku] 450 ey ikni ,df=r fd; x; rFkk ou vul/kku ifj l j ¼vdk''B ou mit ckxku½ e ey D;kfj;k e LFkkfir fd; x;A mÜkj[k.M rFkk e/; in'k l cht ,df=r fd; x; rFkk ik/k'kkyk ik''k.k ikr fd;k x;kA cht cd LFkkfir fd;k x;k] ;g cht mRiknu d fy, vkj iknik l le) fd;k tk jgk gA yxHkx 1-739 fdyk cht] cht cd l ink fd;k x;kA mÜkj[k.M rFkk e/; in'k l cht cd ,df=r fd; x; rFkk ou vul/kku l LFkk e LFkkfir cht cd l cht ck, x; rFkk df''k ijh{k.k d fy, ik/k'kkyk ik''kr dh xBA yxHkx 2000 vdj mxk; rFkk ik''kr fd; x;A

ekbØkLVkbfiy l okfyph dk bld; ikdfrd vkokl e okuLikfrd cgLFkkfud rduhd ijh{k.k ekbØkLVkbfiy l okfyph dk okuLikfrd cgLFkkfud rduhd tkudkj e g] ijUr bldk i;kx'kkyk l Hkfe ifØ;k fodflr ugh dh xb gA vRk% fodflr rduhd dk ngjknu d igkMh {k=k e bld ikdfrd vkokl e ijhf{kr fd;k x;kA itkfr d eljh] pdjkrk] uuhky] vyeMk rFkk ujUn uxj ou iHkx e gku ij lo{k.k fd;k x;kA itkfr;k dh ouLifrd cgLFkkfud rduhd dk LFky ijh{k.k rhu LFkyk t l pdjkrk] eljh rFkk /kUkYVh e fd;k x;k gA of) voykdu] vkdMk vfHky[ku rFkk i;kxkRed Hk[k.Mk dk ik''k.k ixfr ij gA



ekbØkLVkbfy / okfyph dh okuLifrd
cgyhdj.k rduhd

cgrj vkfy;kjftu mit d fy,] mÜkj[k.M
di phM ikbu d fy, jflu Vfix d ckjgky
if) r dk LFky ijh{k.k mRikndrk c<ku rFkk
ijEijkxr Vfix if) r d gkfudkj d iHkkok I o{kk
dh Ij{k d fy, iHkkoh ikbu jflu Vfix rduhd

vdk"Bou mit

dh vko';drk gA LFky ijh{k.k d fy, lo{k.k
fd; x;A eljh ou foHkkx d ikbul jkDlohx
mRiknd {k= dk p;fur fd;k x;kA ou vul/kku
ILFkku e ,d LFky pfEi;u rFkk IB Cykd e
in'ku rFkk foLrkj mnn'; I p;fur fd;k x;kA
Vfix rFkk ekfdx d fy, o{kk dk p;u exjk
dEiuh I [;k 2 e fd;k x;kA dy 195 o{kk dk
Vfix dk; d fy, fpUgr fd;k x;kA jflu Vfix
dk; ckj gky i)fr dk mi;kx dj d fd;k x;kA
mit dh ipfyr fjy i)fr I ryuk dh xBA



o{kk dk p;u



fjy i)fr



ckj gky i)fr



vko'; d ryk e vl/; ;u d fy, Fkkbel Ijikbye dk l xg.k ,o 'k"du

dVkb: dh fofHkUu voLFkkvk e fofHkUu Åpkb: oky: LFkkuk: ij mx: Fkkbel Ijikbye d: vko'; d ryk: dk vl/; ;u% yeh, 'kh; k dk , d txyh ikni Fkkbel Ijikbye cgr egRoi.k lxf/kr ry j[krk g tk fd yhykuy rFkk fyuky; y , l hVV t l egRoi.k ?kVdk l cuk gvk g] fofHkUu ?kVdk ij vk/kkfjr ry rRo rFkk l ; ktu ikni dh of) dk iHkkfor dj jgk g vr% bld fodkl dk fo'y" k.k fd; k x; k tk mÜkj[k.M jkT; d fofHkUu LFkkuk e mxk; k tkrk gA fofHkUu ftyk e bld vlRrRo dk irk yxku d fy, LFky nkj fd; x; ifj.kkek u l fpr fd; k fd txyh rFkk mxk; x; ik/kk e ry ifr'krrk cgr vf/kd fHkUu ugh gA ijuR Fkkbey rFkk vU; ; kfxdk dh ifr'krrk mxkb xb fdLe e cgr T; knk c< xb FkhA [kktk dk idk'ku d fy, Hk tk x; k gA

ifj.kke% ry l [k ok; oh; Hkxk l iklr fd; k x; k rFkk t l h rFkk t l h&, e, l }kj k fo'y"kr fd; k

ou vu: l U/kku l LFkku & vdk"V ou mit ik/k'kkyk i; kx LFky& I e [kyh ey D; kfj; k e ck, x; ; ch t lykflVd dh V tM Vuj ikyh cx





ou vu|U/kku lLFkku&vdk"V ou mit ik/k'kkyk i; kx LFky&I ei [kyh ey D; kfj; k ei ck, x; i cht

cht cku d fy, r; kj D; kfj; k

vdfjr cht



,df'k;k ,ychMk dk QkbV&jklk;fud ijh{k.k%
 ,df'k;k ,ychMk l to lfØ; ;kfxdk dk
 iFddj.k ikjEHk fd;k x;A ,df'k;k ,ychMk d iUkk
 rFkk Nky e mifLFkr jklk;fud ;kfxdk d iFkdj.k
 rFkk <kpk fooj.k lfr vu|U/kku fØ;kdyki fd;
 x; rFkk mld lk'pkr lkbyUMDyfM;e
 DokbUD; lIVkVe] ,Lijfty l ukbtj rFkk
 jkbtkdVkf; lkkyuh ij lRok d dodjk/kh
 fØ;kdykik ij vl; ;u fd;k x;A y{; dk iklr
 dju d fy, ,df'k;k ,ychMk dh Nky rFkk iUkk dk
 foyk; dk d lFk fu"df'kr fd;k x; k rFkk v'kkf/kr
 lRok dk dodjk/kh fØ;kdykik dh tkp d fy,
 Hktk x;A dkye ØkEkVxkQh d }kjk ;kfxdk dk
 iFddj.k ixfr ij gA

foi.ku ri=% ioh mUkj in'k d p;fur ftyk l
 0; k k fjd : lk l egRoi.k vk"/kh; ikni fy; x;A
 t l nk fty bykgckn] okjk.k l h t l fo/kku iBkj

d nk fty t l fetkij] judV rFkk mUkj in'k
 d rjkb e nk ftyk cgjkbp rFkk cLrhA cktkj
 lo{k.k dh i'ukoyh r; kj dj yh xb rFkk fd l ku]k
 cktkj rFkk m l xk ij ijhf{kr dh xb rFkk mld
 vulkj l'kkf/kr dh xBA bykgckn fty dk
 lo{k.k ijk dj fy; k x; k g rFkk okjku l h fty e
 ixfr ij gA

vpudekj&vejdVd ck;kLQ; j fjto e/
 in'k dh cQj rFkk lØe.k {k= e lenk;
 lghkxfxrk }kjk p;fur l dVxLr vk"/kh;
 ikni dh tul; ; k xfrdk rFkk l j{k.k iCU/ku
 tkjh g% vpudekj&vejdVd ck;kLQ; j fjto
 d cQj rFkk lØe.k {k= e fLFkr vejdVd rFkk
 ioh djft; k jt dk lo{k.k fd;k x; k rFkk
 vk/kkj&j[kk lpuk t l {kerk vkokl {k= xke
 ou lfefr; k ij ,df=r dh xBA vk"/kh; ikni
 dh p;fur yf{kr itkfr; k dh cflr; k t l

vdk"B ou mit



FkkyhdVe Qkfy;kyk Iej , Echfy; k LVhfj; e dkVe]
:fc;k dkMhQkfy;k rFkk IykLVl iuhdyVI dh
igpku dh xba tul[;k vdkj] y{; i tkfr;k d
<kp] vkokl y{.kk rFkk p;fur vk"kh; ikni
i tkfr;k dh lgk;rk l i tkfr;k dk vfHkfyf[kr
fd;k x;A foLrkj lkexh t l i kLVj rFkk i"ukoyh
tkx:drk dk;Øe d fy, r;kj dh xb rFkk
xkeh.kk d l kFk bVjQl }kj k lid fd;k x;A
Mkex<] mejxkgku rFkk [kjhnh d xkeh.kk d l kFk
nk bVjQl dk; 'kkyk, vk; kft r dh xba

vk"kh; ikni d; /kkj.kh; dVku dh odfYid
if) ; k dk fodkl % tcyij] ckyk?kkV] jhok] ckMyk
%e/; in" k½] pUnij] VMkxko] vYykyih] VmMkck]
ukfld %egkj"V½] rFkk dkUph] iUVk jkM] fcyk l ij]
jk;x<] ejokgh] xfj;kcUn %NÜkh lx<½] gfj"kdj]
pEikx<] [kn] dkjkiV %mMh l k½ d ouk {k=k e ukfer
i tkfr;k ; Fkk& cgfu;k ojhxkV k %dpukj½
gkykjghfu;k , VhMkbl Vfjd k %drkt½ vkj k t kbye
bfMde %f" k; kukd½ l jkd k v"kkdk %v"kkd½ rFkk
Vehukfy;k vtuk %vtuk½ d oDyfid dVku dk
dk; i.kkfy;k d ekudhdj.k d fy, i; kx fd;
x;A fofHkUu dVkb if) r; k t l 1@3 rFkk 1@4
Cy t vdkj] v/kke[kh iVVh % , dkUj rFkk forfjr
iVfV; k½ dVkb dk i; kx fd; k x;A fofHkUu ikni
Hkx t l rUkk] Nky] "kk[kk Nky bR; kfn , df=r fd;
x; rFkk mud QkV k jk l k; fud rRok %Vfuul]
, ydykvkbM] %yokukvk; M] fQuky l rFkk
fQukfyd vUyk½ d fy, fo"yf"kr fd; x;A nckjk
r;kj dh xb Nky , df=r dh xb rFkk e[;
lfØ; lkexh d fy, eY; kfd r fd; x;A Nky
iu:Riknu ij fu;fer voykdu vfHkfyf[kr fd;k
x;A ifj.kkek u crk; k dh v/kke[kh iVVh dVku



Vfeufy;k vtuk o{k d ru ij
, d l Qn fu'kku fn[krk gvk



Vfeufy;k vtuk o{k Nky dk
iu:Riknu fn[krk gvk

if) r vU; dVku if) r; k l mRd"V g Nky
iu:Riknu ij vdkMk u crk; k fd NkV o{k ftue
thch, p < 80 leh g e Nky iUkk ikflr cgr rho g
i.k Nky iu ikfIRk o{k ftue thch, p > 80 leh
Fkka nk o"kk e n[kh xb fuEure dVku ; kx; ?kj k
i tkfr l i tkfr e fHkUu Fkka fpUg dh foi jhr fn"kk
l nk o"kk d i'pkr igy l dVku fd; x; o{k k l
Nky dkVh tk l drh gA fofHkUu ikni Hkxk dk
QkbVkj k l k; fud fo"y" k. k l Kkr gvk fd ruk Nky
lfØ; lkexh dk vf/kdre Hkx j[krh g] ijUr "kk[kk
Nky rFkk iUk Hkh ruk Nky d LFkku ij i; kx fd;
tk l dr g ey Nky iu:Rikfnr Nky dh vi{k k
QkbVkj k l k; fud ?kVdk dh mPp ek=k j[krh gA
, VhvkD l hMUV fØ; kdyki fo"y" k. k Hkh mi; Dr Nky
i tkfr; k d Nky ueuk e fd; k x; k ftle
Vh- vtuk e vf/kdre , VhvkD l hMUV fØ; kdyki
ik, x, A

vtuk Nky %Vehufy; k vtuk½ dh /kkj.kh;
dVku i.kkkyh% dkUph] iUVk jkM] fcyk l ij] jk;x<]
xfj;kcUn %NÜkh lx<½ d ou {k=k e Vehukfy;k
vtuk %vtuk½ d /kkj.kh; dVku dk; i.kkkyh d
ekudhdj.k d fy, i; kx fd; x;A fofHkUu dVku
i) fr; k t l 1@3 rFkk 1@4 Cy t vdkj] v/kke[kh
iVVh % , dkUj rFkk forfjr iVfV; k½ dVku ij
i; kx fd; k x;A fofHkUu of) fu; ked t l
vkb, ,] vkbch, ; ckjMhvkD l feJ. k] uhe d iUkk dk
j l] vkd] dj t bR; kfn dk o{k ru d dV g,
/jkry ij] Nky iu:Riknu ij mud iHko dk
v/; ; u dju d fy, yxk; k x;A fofHkUu ikni Hkx
t l rUkk Nky] "kk[kk Nky] Vguh Nky] iUk] Qy
bR; kfn , df=r fd; x; rFkk mud QkbV k
jk l k; fud ?kVdk %Vfuul] jk[k] vkD lfyd l kbm
, flM] xfyd , flM] , yfxd , flM] dkfMd
xyk bdk l kbm] Qyokukvk bM l] fQuky l] rFkk
fQukfyd , flM½ d fy, fo"yf"kr fd; x;A Nky
iu:Rikfnr Nky dk Hkh , df=r fd; k x; k mudh
ie[k lfØ; lkexh d fy, eY; kfd r fd; k x;A Nky
iuof) l Kkr gvk fd v/kke[kh iVVh dVku
if) r vU; dVku i) fr; k l mRd"V gA Nky



iu:Riknu ij vkdMk I Kkr gvk fd Nkv o{k
ftue thch,p <90 leh g mue Nky iu ikflr
cgr rho gA fuEure dVku ;kX; ?kjk <60 leh
gkuk pkfg,A fofHkUu of) jxyVjk rFkk dhVuk“kdk
dk vui;Kx ifØ;k v/khu g] ikdfrd rFkk
iu:Rikfnr Nky d QkVkjI k;fud fo“y“k.k I
Kkr gvk fd ikdfrd Nky iu:Rikfnr Nky dh vi{k
lfØ;k I kexh dh mPp ek=k j[krh gA ikni ueuk
dk mudh ,VhvkdI hMV fØ;kdyki d fy, fo“yf“kr
fd;k x;KA tkfd Nky ueuk e vf/kdre ik, x,A

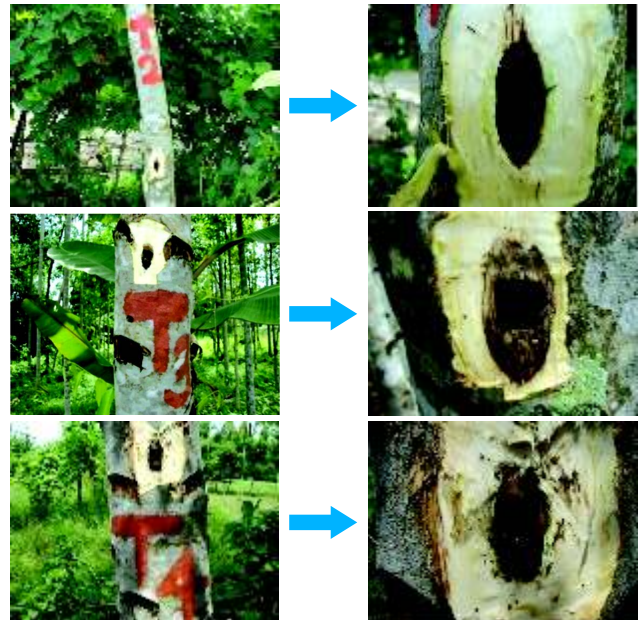
Hkbi&vkuyk ¼QkbyUFkI vekjI½ Iky iuhi
¼MI lekfm;e xixfvde½ RkFkk cpinh ¼fMLd kfj; k
fgLi hfM; k½ dh /kkj.kh; dVku i. kkyh% NÜkh Ix<
e QkbyUFkI vekjI Mlekfm;e xxVhde rFkk
MkbLd kfj; k ghfLiMk d /kkj.kh; dVku dk
ekudhdr dju d fy, i;kx fd; x;A dVku
j t kbel dk ekudhdr dju d fy, v/; ;u ifØ;k
v/khu gA tI ijk ikni mipkj d vulkj dVvk
tk;xk tI ,p1 ¼fu;f=r½ ,p2 ¼40% dVku½ ,p3
¼60% dVku½ ,p4 ¼80% dVku½ rFkk ,p5 ¼100%
dVku½ dVku d I Hkh Lrjk ij ikni dk dkyj Lrj
rd dVvk x;KA

dN p;fur vk“k/kh; ikni dk mud; ikdfrd
,Vh vkDI hMV ?kVdk di fy, dVku le; %
v/; ;u d v/khu p;fur ikni dh miyC/krk d
fy, Vkke;k rFkk Myk[kjh ikdfrd ou rFkk
vk“k/kh; ikni Ij{k.k {k=} Myk[kjh e lo{k.k fd;k
x;KA fteuhek IyoLVh itkfr;k juh[kMk chV]
dEikVeV I[;k ih&f>jik jt] e miyC/k FkhA
MCY;- IkuhQjk rFkk LVhfo;k jcfM;kuk dh
i;kxRed D;kfj;k I h,Qvkj,pvkjMh ik/k“kkyk
e LFkffir rFkk ikf“kr dh xBA ,e- vkyhQjk]
th- IyoLVh] MCY;- IkuhQjk rFkk ,I- jcfM;kuk
d iÜkk ueu IUVj rFkk ikdfrd ou I ekfId le;
vUrjky ij ektnk jki.kk I ,df=r fd; x;A
i)fr dk ekudhdr fd;k x;k rFkk vkdfyr
,VhvkdI hMV ?kVd tI ,Idkjfd ,fIM] dy

fQukyI] fQufyd ,fIM dk eØk,yheV rFkk
vxrj fo“y“k.k ixfr v/khu gA

o“kk ou vuI U/kku I LFkku] t kjgkV

,D; yfj;k ekykI fU I I ,y- e: vxkjoM
Qkje'kku di fy, Vhdkdj.k rdudh% vxkj o{k
e vxkj idk“B d mRij.k di fy, rtij e dod d
df=e Vhdkdj.k b,D; yfj;k ekykI uufI I yEd
e vxkj oM Qkje'ku di fy, Vhdkdj.k rdudh
dk ekudhdj.kB ifj;ktuk d v/khu fd;k x;KA
ing o{k dk rdudh dk;Øe d vulkj Vhdkdr
fd;k x;KA Vhdkdr o{k dk vxkjoM Qkje'ku di
fy, rhu ekg Ik'pkr voykfr fd;k tk;xkA
Vhdkdj.k d LFkku ij vxkjoM d Qkje'ku d
Qyko dk ekik x;KA ueuk dk Vhdkdr LFkyk I
,df=r fd;k x;k rFkk i;kx'kkyk v/; ;u d fy,
i;kx'kkyk e yk;k x;KA IØfer ueuk I iFkdj.k
u Vhdkdr dod dh miFLkfr dk n'kk;KA



i/kku dod d IkFk Vhdkdj.k d 3 egu Ik'pkr
vxj oM d I fou;kI di fy, n';&voykdu

dkehQjk foxVh% xxy dkehQjk foxVh ij
uVod vuI U/kku ifj;ktuk tkjh gA

pkj ifrdfr;k d IkFk vkjchMh fMtkbu e
fI rEcj 2007 e Dykuy in'ku ij h{k.k LFkffir fd;
x; rFkk iR;d ifrdfr e ifr io'k vkB ikni gA



ijh{k.k 41 egHu ijKuk g rFkk tkykj d 44% I ydj t;ij d 100% rFkk mld lk'pkr ckjejj chdkuj rFkk nkIk d 94% rd FkA vKlr ikni Åpkb Hkjrij d 112-14 leh I ydj Vkd d 192-22 leh] vKlr 'kh"K tkykj e 104-64 leh I ydj 183-98 leh e fldj lkr rFkk mld lk'pkr 183-52 leh Vkd lkr rFkk vKlr 'kk[KKvk Hkjrij I ¼3-09½ I ydj ¼5-61½ rd >u>u lkr e FkA vKdMk <0-001 IHkko; Lrj ij IHkh of) ijkehVjk d fy, egRoi.k FkA Mh, evkjVh d vK/kkj ij IHkh 21 dykuh; lkrk dk 10 legk e ckVx; kA tcf d 'kh"K dk lkr rFkk 'kk[KKvk dk 6 legk e ckVx; kA

fofHkUu flpkb; k d e[; iHkko ¼I₁, I₂, I₃ 30, 45, 60 fnu½ rFkk mojd mipkj ¼, Q₀ ¾ dkb vKxfud [KKn ¼, Qokb, e½ F₁ = 2 fd-x@ifr xM<k ;F₂ = 5 fd-x@ifr xMMk; F₃ = Urea 50 xk@ifr xM<k ¼46% ukbVktu½; F₄ = SSP xk@ifr xMMk (20% QkLQkjI) ;F₅ = 5 fd-x ¼, Qokb, e½ + ;fj; k 50 xk@ikni; F₆ = 5 fd-x , Qokb, e + SSP 50 xk@ikni; F₇ = ;fj; k + SSP (50 xke iR;d) dk [kr e jki.k d i'pkr dkehQjk d df"K&ijh{k.k e vui; kx fd; k x; kA vKlr ikni yEckb ¼ leh½] 'kk[KKvk dh I[; k rFkk 'kh"K 0; k I ¼ leh½ 182-69 T₃ e 4-46 I₃ e 5-05 rFkk I₁ e 168-96 leh I ydj 174-08 leh I₃ e FkA fofHkrk d fo'y"K.k u fn[KK; k fd flpkb vrjkyk dk vKlr ikni Åpkb rFkk 'kk[KKvk dh I[; k ij Åpk egRoi.k iHkko iMrk g tcf d flpkb }kj k 'kh"K 0; k I iHkfor ugh FkA

mojd mipkj d vui; kx u dkehQjk iknik dh of) ij egRoi.k iHkko fn[KK; kA vKlr Åpkb] 'kk[KKvk dh I[; k rFkk 'kh"K 0; k I mipkj e 182-24 leh F₇ e] 205.82 leh F₂ e] F₁ e 3.98 I] F₇ e 5.66 rFkk F₅ e] 160.97 leh rFkk mld lk'pkr utnhd I ¼161-67 leh½ I 183-16 leh F₂ e FkA fofHkrk d fo'y"K.k I Kkr gvk fd 'kk[KKvk dh I[; k d I Ecu/k e ikni of) ij mojd k iHkko egRoi.k : Ik I mPp Fk tcf d ikni Åpkb rFkk 'kh"K 0; k I mojd ifr mUkj I egRoi.k : Ik I iHkfor g, A

vfouk'kh xkn mRiknu% dkehQjk foxVh d i; kxRed ijh{k.k dekv; k , udyktj] dyku ou {k=} tk/kij e ikf"kr fd; x; A j{kkRed mik; ¼nhdjk/kh rFkk dodjk/kh dk mi; kx½ tu 2010 e fd; x; rFkk dodjk/kh rFkk nhd jk/kh dk ekf d fNMdKo tuojh I ekp 2011 e fd; k x; k tcf d th, 3 dk , d ckj fNMdKo NVkb fd; g, iknik e fd; k x; kA of) vKdM ¼Åpkb] 'kh"K rFkk dkyj 0; k I ½ rFkk ouLifr fLFkr vDrcj&uoEcj 2010 e vfhkfyf[kr dh xBA i; kx I[; k 1 e] Åpkb dk of) vKdM 150 I ydj 216-6 leh] 'kh"K 0; k I 210 I ydj 307-5 I rFkk dkyj 0; k I 4-84 I ydj 6-83 leh mle 8 dh I[; k e 'kk[KK, @ikni d lKf FkA i; kx I[; k 2 e Åpkb 105 I 290 leh] 'kh"K 0; k I 175 I 345 leh rFkk dkyj 0; k I 4-41 I 8-33 leh 3&7 dh I[; k e 'kk[KK, @ikni oky FkA

iryh 'kk[KKvk e ifr'kr ueh ¼ikLV bFkhQku mipkfjr ikni½ 57-2&69-1%] uoEcj 2010 e fofHkUu mipkj e FkA ih&bFkhQku foyk; d fu"d"K.k ¼2009½ iVky; e bFkj] bFkkby , lhVV rFkk , lhVV rFkk , lhVku lRo Øe'k 1-76 I 1-9%, 0-97 I 1-31%, rFkk 0-52 I 0-89% rFkk 0-52 I 0-89% FkA iryh 'kk[KKvk dh p.k Ikexh ¼ikLV bFkhiku &2009½ nlj fujUrj xkn fu"d"K.k d lk'pkr , df=r dh xBA bl iVky; e bFkj ¼60&80½ bFkkby , lhVV rFkk , lhVku d lKf fu"df"kr fd; k x; kA vKlr eY; u fn[KK; k fd vf/kdre ifr'kr fu"d"K.k iVky; e bFkj d lKf vfhkfyf[kr fd; x; A ; g fu; f=r 3-0% e vf/kdre] mld lk'pkr 2-42 I ydj 2-64% rd bFkhQku dh fofHkUu ek=kvk e FkA bFkkby , lhVV d fo"K; e jt 1-3% fu; f=r e tcf d 1-47 I 1-86% rd bFkhQku ek=kvk u lfpr fd; k fd bFkhQku dk i; kx mit dk c< jgk gA ; g Hkh fjiKV fd; k x; k fd xxyLVhju Yd'ku e vkrk gA , lhVku d fo"K; e jt fu; f=r e 1-40% tcf d fofHkUu bFkkby ek=kvk e ; g 1-28% FkA



रक्यदक 1- xxy 'kk[kkvka d fofHkuu foyid lRok dh ifr'kr ¼ikLV bFkhQku½

jk l k; fud ek=k, l		MCY; @vk fl pkb. rFkk MCY; @vk , Qokb, e ¼vkb½	, Qokb d l kFk			vk l r
			vkb ₀	vkb ₁	vkb ₂	
l ho	ihb	2.30 %	2.57 %	3.02 %	3.41 %	3.0 %
	bVhovk, l h	1.42 %	1.31 %	1.09 %	1.52 %	1.30 %
	, l hVku	1.36 %	1.38 %	1.35 %	1.48 %	1.40 %
l h1	ihb	2.64 %	1.76 %	2.62 %	2.82 %	2.40 %
	bVhovk, l h	2.26 %	1.97 %	2.55 %	1.07 %	1.86 %
	, l hVku	1.25 %	1.26 %	1.20 %	1.35 %	1.27 %
l h2	ihb	1.87 %	1.31 %	3.52 %	2.68 %	2.50 %
	bVhovk, l h	1.41 %	2.01 %	1.35 %	1.37 %	1.57 %
	, l hVku	1.12 %	1.20 %	1.34 %	1.31 %	1.28 %
l h3	ihb	3.26 %	2.26 %	3.0 %	2.66 %	2.64 %
	bVhovk, l h	1.58 %	1.79 %	1.16 %	1.48 %	1.47 %
	, l hVku	1.40 %	1.10 %	1.32 %	1.42 %	1.28 %

vkb½ fcu k fl pkb fcu k , Qokb, e
vkb₀½ , Qokb, e d l kFk , d ckj fl pkb
vkb₁½ , Qokb, e d l kFk 20 fnuk d vrjky ij fl pkb
vkb₂½ , Qokb, e d l kFk 30 fnuk d vrjky ij fl pkb

ihb ¼ iVky; e bFkj l Ro
bVhovk, l h ¼ bFkby , l hVv l Ro
, l hVku ¼ , l hVku l Ro

nlj i; kx ¼2010½ xkn d fudkyu d lk'pkr
ikni xMMk ueuk d enk fo'y" k. k ueu xfe; k
2010 e , df=r fd; x; A pH₂, EC₂, % SOC rFkk
QkLQkj l dh jt Øe'k 7-1 l 8-1 l 0-20 l 0-84 l 0-
21 l 1-30 rFkk 4-21 l 13-88 fdx@g FkhA enk
/kjry rFkk enk xbjkb ¼0&20 l en½ e dkb egROI. k
vUrj ugh Fkka

i; kx 1 rFkk 2 d vfrfjDr l Hkh iknik e
ekfld vk/kkj ij fQuykftdy voykdu fd; k
x; kA Qojh 2010 e dN iknik e iÜk mRiUuk gku
d l kFk&l kFk i"i. k Hkh n[k x; kA eksp 2010 e
yxHkx l Hkh&iknik e fNViV Qy mRiFuk n[kh xb
rFkk viy 2010 e ; g ?kuh gk xBA volfjd Qyu
d l kFk ekulu d lk'pkr ¼tykb l vDVcj 2010½
rd ikni ipj gj FkA 'k : uoEcj e ik/k ihy gku
'k : gk x; rFkk l Hkh ikni Qyu d l kFk uoEcj vr
e ijh rjg l iÜkk foghu gk x; FkA o" k 2011 e
Qojh e Qyu n[k x; k t k fd xr o" k dh ryuk e
, d eghuk igy Fkka

fofo/k bFkhQku ek=kvk ¼0-175 rFkk
225 fex½ d l kFk eksp d vfUre l l rkg 2011 e
nkgu i; kx ikjEHk fd; x; rFkk ikni e , d LFku
ij Vhd k yxk; k x; k rFkk 3 ; k 4 phj fn; x; A
lcl igy xkn , df=r dh xBA mipkfjr iknik e
xkn dk cguk voykfd r fd; k x; kA vHkh rd l Hkh
o{k LoLFk g] xkn fudkyu d lk'pkr bu iknik l
'kk[kk dye ¼1-5 l 3-5 0; k l ½ yh xb rFkk jkfir dh
xBA 85% dyek e vdj. k n[k x; kA



dkehQkj k foxVh dk ?kko Hkj k o{k
rh l jh ckj xkn fn[kkrk gvk



Mh,e,ihvkj] vkUkUn e 8 l 12 ekp dk 9 o"kh;
12 iknik ij pkj bFkhQku ek=kvk ;Fkk; o,150,160
rFkk 170 ,et h d l kFk bFkhQku Vhdkdj.k vk/kkfjr
xe&vkybv&jhflu fu"d"k.k rdudh dk in'ku
fd;k x;kA 'kk[kkvk d dkyj 0;k l dh jt 2-60 l
6-91 leh rd FkhA

dkehQkj foxVh dh fv'k dYpj ikVkdky% l c
dYpfjx d }kj rhu o"kh l vf/kd dk ,Ec;ktfud
dyl yxkrkj ikf'kr fd;k x;kA pØh;
,Ec;ktuf l LFkfkir RkFkk LFk;h fd;k x;kA

l'kkf/kr ,e, l ek/;e e LkEifjr fxcjfyd
,flm d fofHkUu lkn.kk ij ,lb,l d vdj.k d
fy, ifjlkDo lQn dkFkd ,Ec;kt dk mi;kx
fd;k x;kA ,lb,l dh mPpre vdj.k ifr'krk
¼62-25%½ l'kkf/kr ,e, l ehfM;e 0-8 fex@,y
fxcjfyd ,flm rFkk fu;f=r ij de vlkekU;
dkFkd ,Eck;kt voykfd r fd;k x;kA dkFkd
,Eck;kt l mRiUu iknifidkvk dk ,Ecfx
¼iknifidk,½ dgk x;kA

mxk, x, ifjiDo vdj.k rFkk i.k
iknifidkvk dk lfoU;k l dk vudyu mUg {k=
volFkxvk e iR;kjki.k d fy, r;kj dju d fy,
fd;k x;kA ; ,Ecfx] Åpkb e 4&5 leh d Lrjk e
vudy cuk;k x;kA ik= dBkj cuku d Lrj ij
mrj thforrk nj 61-5% rFkk ij&ik= dBkj cuku
d Lrj ij ;g 100% FkhA dBkj cuk; x; ikni
¼Åpkb e 10&12 leh½ dk ikyhcx l e enk rFkk
,Qokb,e d 2½ d vuikr e Hkjk rFkk ,d eghu d
fy, ,xkuV 'km e 75% 'km d fy, j[kk x;k rFkk
ml d lk'pkr ofk d uhp j[kk x;k tgk mUgku
80 leh rd Åpkb iklr dhA

ipkl fv'k dYpj mxk; x; n<hdr iknik
dk {k= e tykb] 2010 e jkfir fd;k x;kA bu e l
42 iknik dk ifjlkDo ,Ec;ktuf l l ikFko l fy,
x;] tcf d 8 iknik dk ,Dlhyjhdyh vk/kkfjr l[e
io/ku ikFko l fy;k x;kA ; ikni LFky volFkxvk

e fiNy nl eghuk e 100% mUkj thfork d lkFk
Hkyh idkj l c< jg gA N% ekfld of) vkdM
,df=r fd; x;A



lkefVd ,Ec;ktuf l l ¼v&Q½
v& xj ,Ec;ktfud dyl ,Ec;ktfud ly e cny x,
c rFkk l& ,Ec;ktfud ly dk cgyhdj.k rFkk j[kj[kko
n rFkk b& lkefVd ,Ec;kl dh ifjiDork
,Q& lkefVd ,Ec;kl dk vdj.k



lkefVd ,Ec;ktuf l l ¼th&,e½
th& ,Ecfx l dk ik= n<hdj.k
,p]vkb]tjd&,Ecfx dh ,Dlfovj n<hdj.k
,y&gj 'km gkml d v/khu iknifidk, ¼jkt len ftyk½
,e& gj 'km d v/khu iknifidk, ¼vtej ftyk½



त्यक्त 2010 e मूके लो/कु ङ्कज मख, x, xxy इनिक दक LFky jki.k

/kkj.kh; dVku% fgekpy in'k e fidjkbtk
djjkvk rFkk oyhfjvkuk tVeku/h dh dVku lhek
dk fgeky;u ou vulU/kku lLFkku] f'keyk e
vkdfyr fd;k x;kA ikFkfed lo{k.k jkT; d
fofHkUu ou iHkxk e fd;k x;k rFkk i;kxkRed
dVku ijh{k.kk d fy, LFkyk dk p;u fd;k x;kA
fidjkbtk d:vk d fy, nk LFky fVuk ouk e
ykgky ou iHkx rFkk dYy ou iHkx e cul : /kkj
dk v/;;u d fy, p;fur fd;k x;kA tcf
oyhfjvkuk tVeku/h d fy, rhu LFky t l dYy ou
iHkx e txrl[k ou] jkeij iHkx e fVDDkj ou
rFkk py ou; tho vH;kj.; e py ou dk p;fur
fd;k x;kA DokMjV v/;;u dk vulj.k djr g,
lHkh p;fur i;kxkRed LFkyk e vk"K/kh; इनिक d
tul[;k vkdM ,df=r fd;k x;kA p;fur इनिक
dh lokre dVku lhek dk fu/kkj.k dju d fy,
lHkh p;fur & ikp LFkyk e tykb&vxLr 2010 e
i;kxkRed dVku ijh{k.k ¼p;fur vk"K/kh; इनिक dh
fu;f=r 25] 50] 75 rFkk 100 ifr'kr dVku% LFkfkf
fd;k x;kA nkuk p;fur vk"K/kh; इनिक d fy,
dVku ijh{k.k LkLFkku d LFky vulU/kku LV'ku d
ik/k'kkyk D;kfj;k e Hkh nkgjk;k x;kA tul[;k
fLFkfr] Qy@cht mRiknu dh l[;k] of)]
iu:Riknu rFkk tul[;k dh ;kX;rk dk fu"d"K.k
>yu d fy, lHkh p;fur vk"K/kh; इनिक e
eY;kfdr fd;k x;kA jkT; ou foHkx LFky dfe;k

e vk"K/kh; इनिक ij tkx:drk yku d fy,
fgekpy in'k d vk"K/kh; इनिक dh igpkul j{k.k
rFkk /kkj.kh; mi;kx ij ou if'k{k.k lLFkku py e
25 Qjoh 2011 dk if'k{k.k fn;k x;kA

2-6-4- vdk"B ou mi t dk jlk;u mi;kfxxrk ifjo/ku rFkk mi;kx

jk l;k;fud vUo"K.kh lfiUM l edkjklh d
chtfxjh fu"d"K.k l gMhMhjkthfuu dk iFkd dju
d fy, ,d l/kkj.k rFkk lxe ifØ;k fodflr dh
xbA gMhjkthfuu ,d {kerkoku to lfo; ;kfxd
g tk viuh dljjk/kh tyujk/kh volknjk/kh
,VhgkbijfyihMhfed] ,VhV;k;jf l l l] Ropk dk
pedku oky] uQjkbv l d mipkj rFkk vU; db
todh; fØ;kdykik lfrg gMMh jkxk dh jkdFkke
rFkk mipkj d fy, tkuk tkrk gA

lef) uked ,d u;k gjk mRikn& j'ke m l kx
d fy, ,d j'ke mRikndrk c<ku oky [kj irokj
l fodflr fd;k x;k rFkk j'ke dk dhMk]
ckEcD l ekjh , - ij lHkxh; j'ke vulU/kku LV'ku
lgl ij e ijhf{kr fd;k x;kA ;g mRikn i.k drkb
d le; dk 32&36 ?k.V l 15&18 ?k.V rd ?kVku
e l{ke gA plef)B dk vui;kx Hkktu eY;
¼'kgrr dh ifÜk; k½ de etnjh fnu ¼etnjh eY;½
LFkku <kpk rFkk le; d lnhk d mRiknu d eY;
dk de djrk gA



fMiYkuhek C; Vhjf'k; k d jklk; fud t k p u
cht k e 65% mPp olh; ry rRo dh mifLFkfr
fn[kkb vk''k/kh; :lk l egRoi.k fMiYkuhek
C; Vhjf'k; k ij QkbV&jklk; fud v/;; u vkjEHk
fd; k x; kA ikdfrd Mkb rFkk mud fofHkUu 'kM
fodflr fd; x; tk fd fofHkUu idkj d oL=k
¼j'ke] Åu rFkk l rh½ dk jxu e l {ke gA 25 Hkkoh
ikni itkfr; k dk ekuo ckyk ij yxku d Mkb d
fu"d''k.k d fy, tkpk x; kA

;dfyIVl VjhVdkful d tuu n0;]
b- gkbchM rFkk ;dfyIVl d N% 0; kikfjd :lk l
mi; kx fd; x; Dykuk dk ,df=r fd; k x; k rFkk
iÜkk dk lh,y,lch ifrjk/k inku dju d fy,
fo'yf'kr fd; k x; kA ifj.kkek u lh,y,lch jkxk d
fy, tuu n0; dh lonu'khyrk fn[kkbA ;dfyIVl
telykle e flyUMDyfM; e yhQ rFkk lhmfyx
CykbV ifrjk/k inku djr jklk; fud ekdj dh
o/krk dk dk; ikjEHk fd; k x; kA tVQk ch ry d
MhVkd lhfQd'ku v/;; u d fy, fjQkbfux ifØ; k
rFkk lyykyhd to it dk dhekbUtkbefVd
ldgjhfQd'ku dk dk; ou vulU/kku lLFkku
ngjknu }kj k ikjEHk fd; k x; kA

,dhjUFkh l , lijk rFkk ,dhjUFkh t chMUvKv
l QkbV, DMhLVjkbM d iFkddj.k rFkk y{.k o.ku
rFkk j'ke d dhM ckEch, DI ekjh ,y- d vkfFkd
y{k.kk ij mud iHkko dk ijk dj fy; k x; k gA
i; koj.k fe= ihihMh eDr ikdfrd ckyk dk jx
yUVkuk dekjk dh vkfFkd {kerk dk mi; kx rFkk
Mk; kLi; k; j l ihjxkbu d Qyk idfVd inkFk dk
v/;; u ou vulU/kku lLFkku ngjnu e fd; k x; kA
ikdfrd Mkb% mÜkjioh {k= d p; fur iknik l
0; kolkf; d Mkb mRikn dk fodkl ikjEHk fd; k
x; kA mÜkjioh {k= dh rhu itkfr; k dk ikdfrd
Mkb d fodkl d fy, vfHkKkr fd; k x; kA fofHkUu
ueuk d fy, lUnrk rFkk le; vudyu dju
i'pkr Mkb dk fu"d''k.k fd; k x; kA fu"df''kr Mkb; k
dk ikdfrd Mkb; k d ijkehVjk d fy, ijhf{kr
fd; k x; kA ikdfrd Mkb mÜkjioh {k=
dh rhu itkfr; k d ok; oh; Hkkxk l fodflr dh
xbA t l& , ik: l k Mkbvkd fl u] , -jkD l oxh]

cDdkfj; k jehQykjk fl u] ch- l i hMk] fcLdkfQ; k
tokfudk ftUgku j'ke] Åu rFkk l rh diM ij
fofHkUu 'kM cuk; A fodflr Mkb u db ijh{k.k t l
fofHkUu jx fLFkjr k x.k t l /kykb] jxMkb] i l huk
rFkk jk'kuh ijh{k.k ik l fd; A v/;; u u l fpr
fd; k fd ; g fodflr Mkb; k fofHkUu idkj d diMk
j'kk dk jxu d fy, mi; kx dh tk l drh gA v/;; u
u yf{kr itkfr; k dk {kerkoku rFkk vk l kuh l igp
tku oky Mkb d lkr d :lk e LFkfr fd; kA

,xy ekeh'ykl dh Qkekdkykftdy [kk t %
lQy fu"d''k.k i)fr; k rFkk , - ekeh'ykl iÜkk d
fofHkUu mÜkd d ÝD l hu'ku] id rFkk xj
id Qyk dk ekudhdj.k fd; k x; k rFkk ikjEHkd
Qkekdkykftdy eY; kduk dh J[kyk dk in'ku
fd; k x; kA fefJr lRok dk rhu ,VhvkD l hMV
fØ; kdykik d fy, eY; k fdr fd; k x; k ftue l
l ijvkd l kbM lQkb dk; mÜke ik; k x; kA
, - ekeh'ykl d rhu fofHkUu mÜkd dk vkxuh te d
fo:) nk ek=kvk 200 rFkk 400 fex e 0; ogkfjd
fØ; kdykik dk v/;; u dju d fy, ijhf{kr fd; k
x; k rFkk ik; fd iÜkk e vkj vf/kd 0; ogkfjd
fØ; kdyki FkA fg; keVkyfyd ijkehVj t l
vkjch l h] MCY; ch l h] ,pch] fgeVkfØV] ,el hch]
,el h, pl h] fy; d l kbV] ly fo'y''k.k d l nHk e
mipkj d i'pkr vrjh; fydk l kbV eku; rk j[kr g
¼id@xj id Qy¾100 ,eth @100 ,eth¾
200, eth½ rFkk vU; l EcfU/kr ijkehVjk dk ekik
x; kA Qkekdkikbvy ekudk ij fo'k''k /; ku nr g,
id rFkk xj id Qyk d fiQkjey'ku dk jkl; fud
y{k.k o.ku mijkDr v/;; u dk ikr l kgu nu
d fy, fd; k x; kA i; kx vkxfute d fo:)
, - ekeh'ykl d fiQkjey'ku dh volknjk/kh
fØ; kdyki ij fjiKV d fy, Qkj l M Lohe VLV u
mPp vk''k/kh; x.kk d l kFk , d mRikn fodflr dju
d fy, vk''kk tud ifj.kke fn[kk, A

o{k tfur riy cht k l fudky; x, v[kk];
riy {kerkoku dhVuk'kd d :lk e% l fiUM l
, ejfxukVI] ikuXfe; k fiUukV] ekfjxk vkyhQj]
dykQkbye bukQkbye] rFkk gkbMukdkil
iUVUMk d o{k tfur riy cht k dk ,df=r fd; k



x;k rFkk ry fu"d"k.k d fy, uku ikykj foyk;d dk mi;kx djr g, xe rFkk B.M fu"d"k.k i.kkfy;k }kjk iLLdr fd;k x;kA, /- ,ekjhxkUF/ d vfrfjDr IEi.k :lk l xe fu"d"k.k B.Mh if) r l vf/kd ry mit djr gA lxxku fu"i=d d fo:) Vhchvk dh ikjFEHkd to fo'y"n.k v/; ;u u mipkj d 24 ?k.V d lk'pkr iKRl kfgd dju oky ifj.kke fn[kk;A ,YVjukfj;k lkykuh] ¶;lfj;e vkDlhl ikje] lfy.Mjk DyfM;e] jkbt kdvfu;k lkykuh rFkk VkbdkL ikfj;e o l hdykle d fo:) dodjk/kh dh ryuk e Vhchvk ryk dh dodjk/kh fØ;kdyki u dkb fojk/kh fØ;kdyki ugh fn[kk;k i jUr l g fØ;k fØ;kdyki fn[kkb fn;A

yUVkuk dekjk ,d gkfudkj d fon'kh [kjirokj d vko';d ry to dhVuk'kd d : i% rfeyukM d fofHkUu Hkxk e lo{k.k fd;k x;k rFkk yUVkuk dekjk fofHkUu Qyk d jx oky %l rjh] xykch] lQn xykch] xykch ihyk] l rjh ihyk% d iUk ry fu"d"k.k d fy, iLLdr fd;k x;A vko';d ry ifr'krrk {k= l {k= rd fofHkUu Fkh rFkk vU; dh ryuk e xykch jx d Qyk d iUkk e mPp FkhA vko';d ryk dh to {kerk dk lxxku fu"i=d d fo:) %fgfCy;k l;jk% rFkk dodh; dYpjl t l vYVjukfj;k lkykuh] ¶;lfj;e vkDlhl ikje] flyMjk DyfM;e] jkbt kdvfu;k lkykuh rFkk VkbdkL ikfj;e o l hdykle d fo:) eY;kfdr fd;k x;k rFkk ykoh; eR;rk dk voykfdr fd;k x;k; i jUr dodh; jkxtudk d fo:) fojk/kh fØ;kdyki ugh n[k x;A gkfudkj d [kjirokj yUVkuk dekjk l gkfkk l cuk dkxt r;kj dju dk lQy i;k l fd;k x;kA

xk.k p;kip;k dk to VklQkje'ku% dTojhuk vdjk dh lrg folØfer tM uMy l l iFkdr Yfd;k LVu dk dYpj fd;k x;k rFkk ck;kdUo l ho ifr fØ;k dk fo'y"n.k dju d fy, dYpj x.kk dk 15&30 fnuk d fofHkUu fnuk %15] 25] 30% dk l dru ;kfxdk dk fo'yf"kr dju d fy, yk;kfQykb tM fd;k x;k tk tM fQft ikyk th rFkk tM of) dk 0; ofLFkr djxhA yk;kfQykb tM dYpj dk pch t l k rFkk bFkkby , l hVV fu"d"k.k Vh, y l h rFkk ,pih, y l h e fLFkr Fk rFkk ,df=r ,pih, y l h v'k

vdk"B ou mi t

th l h&, e, l&, e, l e fo'yf"kr fd;k x;A dk; xk.k p;kip;k d vxrj y{k.k o.ku d fy, ixfr ij gA

to ifjj{k d% vkjxuk eVfyd dEiyDI dk l'y"n.k l h l h, e v k l fud ?kVdk dk ifr LFkffir djr g jgk g rFkk dk"B foKku ,o ik l kfxdh l LFkku cxykj e v/k to ifjj{k d d : lk e eY;kfdr gv kA DyhLVUkFk l dkyhu l rFkk ik l kfi l tyh¶yjkj d ikdfrd : lk l miyC/k ikni mRiknk dk mi;kx djd lk;koj.k fe= dk"B ifjj{k d fodfl r dju d i;k l fd;k x;A DyhLVUkFk l dkyhu l VkdDl d gku d dkj.k tkuk tkrk g] ft le rhu leku ;kfxd t l DykbVufku ,ch l h %fMigkbyhu Xykbdk l kbM% vU; xk.k p;kip;k d vfrfjDr gA ik l kfi l Tyh¶yjkj nk e[; jk l k;fud RkRo tyh¶yjkjhu rFkk tyh¶yjkj l hu g] nk e[; ,YdkMok;M l] vU; xk.k ;kfxdk d vfrfjDr j[krk gA bu iknik dh Nky rFkk iUkk dk feFkkuky fu"d"k.k bl dh dodjk/kh fØ;kdyki] nhed rFkk Nndk d fy, ijhf{kr fd;k x;kA nkuk fu"d"k.k OgkbV : V rFkk ckmu : V {k; dkjd Qxh dk jkdu d fy, iHkkoh ik; x;A fu"d"k.k dh NkVh ek=k Nnd rFkk nhed gey dk fu;f=r dju d fy, iHkkoh ugh FkA vxrj iUkk rFkk Nky d feFkkuky fu"d"k.k dk dkij lYQV rFkk ikVkf'k;e MkbØev ?kx d l Fk ifØ;k dhA mPp uk'koku jcm oM dk dEiyDI feJ.kk d l Fk mipkfjr fd;k x;kA rFkk pdod d fo:) dk"B ifj{k d d ifjj{k d d i;kx'kkyk ij h{k.k% dh ekuohdr i) fr dk mi;kx djd dk"B {k; Qxh d fy, vukor dj fn;k x;kA uk'koku jcm oM dk"B {k; dod d }kjk lØfer ugh gv k tcf d fu;f=r ueu ij ij h rjg l dod dk geyk fd;k x;kA IS 4873 d vulkj dEiyDI feJ.k d fMi mipkj d }kjk Nnd dhVk d fy, ij h{k.k ck l ukyk ij fd;k x;kA IS 4873 %1982% d vulkj dk"B foKku ,o ik l kfxdh l LFkku cxykj QhYM LV'ku e ck l i tkfr;k rFkk jcm oM dk nhedk d fo:) LFky ij h{k.k fd;k x;kA DyhLVUkFk l dkyhu l rFkk ik l kfi l tyh¶yjkj d dEiyDI feJ.k dk ncko rFkk fMi mipkj v/khu jcm oM rFkk ck l i tkfr;k ij mi;kx fd;k x;k;



nhed rFkk Nndk dk fu;f=r dju d fy, tcf d
fu;f=r ueu âkfl r ik; x;A

Hk ki vflFkj Øhv k l kV¼, loh l h½ dk dk"B ifjj{k d
d i n'ku dk eY; k du fd; k x; k% dukVd rFkk
d j y d fofHkUu LFkkuk l l k r o{k i t k f r; k d dk"B
ueu [k j h n x; v i f j " d r f Ø; k l k V [k j h n x; r F k k
Hk ki v k l o u d } k j k Hk ki v f l F k j f Ø; k l k V¼, loh l h½
i k l r f d; x; A p k j p; f u r o{k i t k f r; k d dk"B
l r r i j , l o h l h d k v u i; k x f d; k x; k r F k k
b l d k i Hk k o t k u u d f y, e k u d h d r d j u d f y,
j [k k x; k A p k j o{k i t k f r; k i j , l o h l h d k dk"B
y i u d l k F k l 'k f y " V M k b d k f o f H k U u l k n . k k r F k k
l ; k t u k e m i p k f j r f d; k x; k A i k d f r d M k b
¼ M y c f t ; k y V h Q k f y ; k ½ d k , l o h l h d k dk"B y i u
d l k F k m i p k f j r d j d f o f H k U u l k U n . k k r F k k
l ; k t u k e i ; k x f d; k x; k A y i u d k ; Ø e p k j
m i p k f j r o{k i t k f r; k d f y, f d; k x; k A

o l h; r i y % d k " B f o K k u , o i k | k f x d h l l F k k u]
c x y k j e d e t k u h t k u o k y h o{k t f u r r y c h t k
t l f x x f v ; k j k V y j h Q k f e l f x Q] e / k d k
b u f l x f u l ¼ j k M y d ½ , p - t - y e] ' k k f j ; k
V e c x x b ; k j k D l o] i k b f l y k f u ; k ; u b f M d e c M]
g k f i ; k i o h ¶ y k j c M] e l Å v k Q j l , y r F k k



e/kdk buflxfu/ if'peh ?kkVk dh ,d l dVxLr i t k f r

c y k u k b V l j k D l c x h d k r y f e J . k m i ; k x i k j E H k
f d ; k x ; k A

dukVd rFkk vkU/k in'k d fofHkUu Hk k x k e
l o { k . k f d ; k x ; k A l k r o { k i t k f r ; k t l f x o k f V ; k
j k V y j h Q k f e l f x Q] e / k d k b u f l x f u l ¼ j k M d y ½
, p - t - y e ' k k f j ; k V e c x k f x ; k j k D l c]
i k b f l y k f u ; j k u b f M d e c M] g k f i ; k i o h ¶ y k j k c M]
f e l v k Q j j k , y r F k k c y k u k b V l j k D l c x h l y U l
d k i g p k u k x ; k v k j c h t , d f = r f d ; x ; A c h t k
d k i l l d r f d ; k x ; k r F k k o l h ; r y d k f u " d " k . k
f d ; k x ; k A r y k d H k k f r d j k l k ; f u d x . k t l
v E y h ; e Y ;] l k c u h d j . k e Y ;] v k ; k M h u e Y ;]
v l k c u h d j . k n 0 ; r F k k v i o r d l p d k d f u / k k f j r
f d ; x ; A

Q k e k d k y k f t d y e Y ; k d u % e / k e g j k / k h x . k k d
f y , x k j l h f u ; k b f M d k l l R o @ l f Ø ; f l) k U r k d k
Q k e k d k y k f t d y e Y ; k d u v l ; ; u v / k h u g A
l c k e . ; k r F k k i U k j ¼ d u k V d ½ l x k j l h f u ; k b f M d k
d Q y , d f = r f d ; x ; A l [k f N y d d k i V k f y ; e
b F k j] D y k j k Q k e] b F k k b y , l h V V r F k k f e F k k u k y d
l k F k Ø f e d f u " d " k . k f d ; k x ; k A f e F k k u k y u
f u " d " k . k d h m P p r e e k = k ¼ 40 % H k k j e ½ i n k d h A
c u t h u r F k k j e k b y , Y d k g y d f o f H k U u l ; k t u k d
l k F k d k y e Ø k e V k x k Q h d } k j k x k j l h f u ; k b f M d k
Q y d f N y d d d P p l k j d k v x r j i F k d f d ; k
x ; k A V k b i I r F k k V k b i I I v k b c h V l d f y ,
L V I V k t k V k l h u m R i f j r e M y d } k j k p g k e , V h
M k ; c f V d x . k k d f y , d P p l k j d l k F k n k f l k U u
v ' k k l f g r i j h { k . k i x f r i j g A 400 r F k k 200 f e - x
l k j @ p g d ' k j h j H k k j f d - x k e d k m i ; k x d j r g ,
l g h v l ; ; u d f y , v P N i f j . k k e i k l r f d ; x ; A

e y f j ; k j k / k h f Ø ; k d y k i k d i f y , i k n i k d h
t k p % e y f j ; k j k / k h f Ø ; k d y k i k d f y , n f { k . k H k k j r
l : V k f l ; k d f y , l n l ; k d k p ; f u r f d ; k x ; k A
V k M k f y ; k , l h d f V d k i k n i l k e x h d , d = h d j . k d
f y , n o v k j ; u k n x] l o u n x l l o { k . k v k ; k f t r
f d ; k x ; k A l H k h i k n i H k k x ; F k k & i U k] r u k] t M r F k k
t M N k y l [k i l l d r f d ; x ; r F k k p . k c u k ; k
x ; k] r c Ø f e d : i l f u " d " k . k f d ; k x ; r F k k e k = k
n [k h x b A r c f u " d " k . k l k j d , M h l h , x h i V h d



rh I j buLVkj yok d fo :) yokh; fØ;kdykik d fy, ijhf{kr fd;k x;k rFkk tMk d DykQke I kj u vPN ifj.kke fn[kk;A leorh ifj.kkek d fy, i;kx ngjk, x,A



VkMky;k ,f'kdVdk

pUnu riy dk ek=kRed vkdyu% dukVd d pUnu oky [kM o{kk I ey ueu ,df=r djv fouk'kh i)fr d }kjk pUnu ry RkRo fu/kkfjr fd;x;A ry rRok ij vk/kkfjr pUnu o{kk e pUnu ry d LFky vkdyu d fy, dk"B foKku ,o ik|kfxdh



pnu dh ydMh d ey ueuk dk Ixg.k&pnu ry d vkdyu dh ,d xj fouk'kh i)fr

ILFku ifj I j I xvkb;k dky ijk,DIhMI jh,tV ¼thihvkj½ rFkk cUthMkbu ijk,DIhMI jh,tV ¼chihvkj½ d I kFk ifrfØ;k d }kjk pUnu o{k d thfor [kky mUdk dk mi;kx djr g, jx ifrfØ;k dk ekudhdr fd;k x;kA vkdMk] tI ?kjk] Åpkb] tyok;oh; ?kVdk dk pUnu dh ydMh d ry dh x.koUkk rFkk ek=k d I kFk IglEcfU/kr dju d fy, vfHkfyf[kr fd;k x;kA

ckl dk ik"kd eY; rFkk mi;kfxrk ifjo/ku% m".kdfVCU/kh; ou vulU/kku ILFku] tcyij d }kjk fofHUU itkr;k ¼MUMkdyeI ,Lij] Mh- fLVdVI] cEc/k cEc rFkk ch-VYMk½ d rkt ckl ijkg dk mud ik"kd rRok d fy, fo'yf'kr fd;k x;kA ifj.kkek I Kkr gvk fd fofHUU itkr;k d ik"kd Lrj e egRoi.k vUrj gA Mh- fLVdVI ¼vkerkj ij e/;Hkkjr e miYkC/k itkr;k½ dk vPN [kk] itkr d :lk e n[kk tkrk g] D;kfd bld ik"kd rRo Mh- ,Lij ¼FkkbyM e tkuh ekuh [kku ;kx; itkr½ d Ieku gkr g] tk e/; in'k e mxkb tkrh gA bld vfrfjDr ch-VYMk rFkk ch-cEc/k ijkg e Mh- ,Lij d Ieku ik"kd rRo gkr gA vr% I Hkh itkr;k e e/; Hkkjr e [kk] ijkg mRiknu dk c<ku dk I kFk gA ckl ijkg d iLLdj.k d fy, I k/kj.k rFkk eY; iHkkoh i)fr;k fodflr dh xBA {kerkoku egRoi.k :lk I fodflr iLLdj.k i)fr;k u I k;uktul dh ek=k dk ?kV;k;k rFkk ik"kd rRok dk cuk, j[kkA ft I I ckl ijkg dk ik"kd jkf/k;k dk gVku d fy, idku io iLLdj.k d fy, mi;kx fd;k tk I dA ckl ijkg d iLLdj.k d i'pkr fofHUU mRikn ;Fkk& cMh] ikiM] Øfpl] pVuh rFkk vpkj cuk; x;A cuk; x; mRikn Lokn rFkk cukoV e vPN Fk rFkk Lokn] [k'c fn[ku rFkk Lokn d I nHk e Hkh Lohdkj fd;k x;A mRikn d ik"kd rRok u ¼cMh] pVuh rFkk Øfpl½ ,d Øfed deh fn[kkb rFkk buq cuk; tku d N% egdu d Hkhrj bldk miHkkx gk tkuk pkfg,A gkykfd ikiM d fo"k; e dkckgkbMV rRo vf/kd de ugh gvk ijUr Lokn vkB egdu d I k'pkr Lohdk; ugh FkA vr% mUg r;kjh d vkB egdu d Hkhrj mi;kx dj yuk pkfg, tcfv vpkj d I nHk e ik"kd rRo 9 egdu e



de g,] ijUr mRikn r;kjh d ,d o"lk'pkr rd
Lokn e Lohdk; rFkk cukoV e vPNk FkKA v/; ;u
ckl ijkg d mi;kx dk ykdfi; cuk;xk rFkk
c<k;xkA de tkuh tku oky [kk] mRikn gku d
dkj.k ckl ijkg iLLdj.k e e/; Hkkjr ,d u;
vfHkUko rFkk mRlkg o/kd mje d :lk e fodflr
gku dk cgr lkeFk gA



ckl ijkg



ckl mRikn ¼cMh½

tlo mRikn d fodkl d fy, ikyhlpjkbMI %
djdek ,xLVhQkfy;k] lh-l ;MkeUVkuk]
Mk;kLdkfj;k cYchQjk] Mh-fgLihfM;k rFkk gkbifvI
LokohvkyU/ ¼cht rFkk ok;oh; Hkkx½
ikyhlpjkbMI d iFkddj.k d fy, ,df=r fd;
x;A ikyhlpjkbMI dk iLLdr rFkk iFkDdr
fd;k x;kA ikyhlpjkbMI ueu d Hkkfrd rFkk
jklk;fud x.kk& LVkp rFkk xkn t l vdkfjd h]

vkdkj] ?kyu'khyrk] nynykiu fu"d"K.k rkieu]
,ehykl] lyykt ry ifr'krrk dk fu/kkjk fd;k
x;kA fofHkUu itkfr;k l ikyhlpjkbMI LVkp dk
,lh;by'ku gkbMk,dvkby]&ikikby'ku rFkk
dkckDlh ehFkkby'ku d }kjk l'kkf/kr fd;k x;kA
vl'kkf/kr LVkp dh ?kurk 1-29 l ydj 1-50
xk@le³ rd Fkh tcf d l'kkf/kr LVkp e egRoik
fofo/krk fn[kkbA l'kkf/kr LVkp dh ifrLFkkiu dh
fMxh 0-040 l 0-277 rd vkdfyr dh xBA LVkp
ikyhejl dk n'kh rFkk l'kkf/kr LVkp rFkk fofHkUu
,MhVkbok d lkeFk r;kj fd;k x;kA Hkkfrd
jklk;fud x.k t l ?kyu'khyrk] ltu 0;ogkj]
ikjnf'krk rFkk to vi?kVu ijh[k.k] ,Qvhvkbvkj]
Fkey] ;kf=d fo'y"K.k rFkk ,DlvkjMh fo'y"K.k dk
in'ku fd;k x;kA vl'kkf/kr ikyhfQyek dh vU;
lkeF; eY; 9½ ,eih, ik;k x;k] tcf d egRoik
fofo/krk t l 45 ,eih, l'kkf/kr ikyhfQYe e ik;k
x;kA elhyt] ikyhfou;y ,Ydkgy] ihVkl u rFkk
cUVkukbV d lkeFk LVkp dh vudyrk rFkk
ikyhfQYe d x.kk ij mud ihkko dk eY;kfdr
fd;k x;kA

ikyhlpjkbMI dk fofHkUu jklk;fud
mipkjk d }kjk l'kkf/kr fd;k x;k rFkk
,Mglkbol d fodkl d fy, fofHkUu ,MhVkbok d
lkeFk LVkp dh vudyrk dk eY;kfdr fd;k x;kA
,Mhlkbol d x.kk t l lfvx Vkbek ty
ifrjk/krk] ikuh rFkk vxkfud foy;dk e
?kyu'khyrk rFkk Fkey xohvFjd fo'y"K.k ¼Vh th,½
dk in'ku fd;k x;kA to ,Mglkbol rFkk l'kfy"V
,Mglkbol dh ryukRed {kerk dk tkpk x;kA

,xy ekehikl ¼cy½ Qyka dk iLLdj.k fofHkUu
ifjiDork d cy Qy cjgk ¼tcyij½ lkyhokMk
vdk"B ou mRikn ik/k'kkyk ¼tcyij] e/; in'k½]
iMkfj;k ¼doj/kk] lth½ l ,df=r fd;k x;A
ifjiDo rFkk vifjiDo cyk d ueuk dk fofHkUu
i)fr;k t l xk; d xckj e Hkuuk] Hkki nuk] fofHkUu
vof/k;k e xe ikuh e mckyuk rFkk xnn d fu"d"K.k
d fy, lkyj mipkj rFkk Nk;k e l[kkuk] ljt
iR;{k rFkk viR;{k mipkj }kjk iLLdr fd;k x;kA



yxnh ueuk ifjiDo Qyk rFkk vifjiDo iLLdr Qyk dh x.koUkk ¼jhcK[yfou] dkckgkbMVI] ikVhu] olk rFkk Qkbcj½ dk vkdyu fd;k x;kA cy Qy xnn e [kk] Hkkx rFkk dkckgkbMV ifr'krrk fofHkUu iLLdj.k i)fr;k e cnyh gb ikb xBA djkvhu rFkk jhcK[yfou ifr'krrk Øe'k 25-6 ,eth@100x l 55-45% rFkk 2 l 8 ,eth@ 100x rd fhkUu FkhA

tutkrh; ykxk }kjk iLLdr cy xnnk ueuk d Hkkfrd jklk;fud x.kk dk vkdyu fd;k x;kA xyr iLLdj.k d dkj.k dodh; gey l ueu dk ud lku gkrk gvk ik;k x;kA xnn d Hk.Mkfjr ueuk dk fo'yf'kr fd;k x;k rFkk dkckgkbMVI] ikVhu] [kfut e egRoi.k fofo/krk ikb xBA

e/kdk bfMdk Qyka l [kk] mRikn e/; Hkkjr e miyC/k l/kuk l e/kdk bfMdk d Qyk dk ,d=hdj.k fd;k x;kA e/kdk bfMdk Qyk dk fu"d"k.k rFkk ek=kRed vkdyu mud ik"kd rRok d fy, i)fr ekudhdj.k fd;k x;kA egvk Qyk dk mud ik"kd RkRok d fy, ek=kRed vkdyu fd;kA egvk Qyk dk mi;kx dj d eY; ifjo/ku mRikn t l pVuh] Ldo'k] l k l rFkk fpDdh fodflr fd;k x;kA ije'k ,yvkBVh [kk] ik[kfxdh iHkkx] ukxij fo'fo[ky;] ukxij l ekxh xb tc vko';drk gbA vxUkj dk; ixfr ij gA

ckl dk b"Vre mipkj le; rFkk fVdkÅiu ijh{k.k mUkjioh {k= dh 0;kikfjd :lk l egRoi.k itkfr;k dk v/;;u fd;k x;kA ch- ifyMk rFkk Mh- gfeyVkukb d 'kh"q] e/; rFkk vk/kkfjd Hkkx l ruk dkVx x;kA 1 eh yEck ckl dk dkij djke ckjku ¼ l h l hch½ d l kFk 8%] 10% rFkk 12% d l kFk mipkfjr fd;k rFkk ckÅpjh vijKVI ¼ tkxfr½ dk ikp ifrdr iR;d dk mi;kx djr g, ckl e 1 l 1-5 fdx nco e l LFkfr fd;k x;kA b"Vehdj.k d nkjku ch- ifyMk rFkk Mh- gfeyVkukb d 360 ckl ueu mipkfjr fd;k x;kA nkuk ueuk dh ikp ifrdr;k 'kh"q] e/; rFkk ry l tkjgkV rFkk



ijkg QQn l Øe.k

l dkb tkQkbye dEe;u }kjk l Øe.k

vkbt ky ckl d nkuk LFkyk l yh xBA ikjfeHkd vkdMk u n'kk;k fd ifj{k.k mipkj d fy, okfNr le; 25 l 90 feuV tk fd ek=] ueh rRo] itkfr;k rFkk ckl dh vk; ij fuHkj djrk gA ifjj{k.k mipkj ckl e l fudyu oky vif'k"V dh LVkd ?kky d fof'k"V ?kuRo d l kFk ryuk dj d gvkA jklk;fud ifjj{kdk d fLFkjhdj.k d fy, mipkfjr ckl ueuk dk Nk;k e l [kk;k x;kA mudk Hkkj rFkk ek=k dk fof'k"V fpflgr igpku l [k d l kFk vfHkyf[kr fd;k x;kA mlh idkj l fudkyh xb vuipkfjr ueuk dh ikp ifr ryuk d mnn'; l ,d rjQ j[k nh xBA fu;f=r l fgr l Hkh ueuk l 5 leh fudky x; dk p.k cuk;k x;k rFkk jklk;fud fo'y"kk d fy, j[kk x;kA ueuk d ikjfeHkd jklk;fud fo'y"kk u dkjfe;e ¼ 2-4 th,e@ueuk(dkij ¼ 1-24 th,e@ ueuk rFkk ckjku ¼ 3-3 th,e@ueuk vklr ynku fn[kk;kA vkbt ky e ijh{k.k ;km e mi;kx fd;k x;] cEc/k ifyMk d 105 ueuk e l 21% Cyd lVh QQn l] 4-2% , l- De;u l rFkk 12-6% nhed l l Øfer Fk(ijh{k.k ;km e Mh- gfeyVkukb d 105 ueuk e l 11-55% Cyd lVh QQn] 27-3% nhed l l Øfer Fk rFkk , l- De;u }kjk fd l h idkj dk dkb l Øe.k ugh FkA

tkjgkV ijh{k.k ;km l Kkr gvk(ch- iyhMk e lVh QQn¼ 3-15%] vKkr QQn 3-15%] , l- De;u 3-15%] nhed l Øe.k 2-11%] jgkA Mh- gfeyVkuk e Cyd lVh QQn 2-15%] vKkr QQn 1-05%] , l- DEk;u 6-3%] nhed l Øe.k 1-05% gA



vf/kdre [kk] eY; d; l kFk ikVhu nkuk; d; mRiknu d; fy, mUkj iohi {k= d; iknik; l; QkbVk&ikVhu

iUkk ikVhu vIk/kkj.k ik"kd k l Hkj gkrk g t k yxHkx fu;fer [kk] l krk d leku gkrk g rFkk db vulU/kkudrkvk dh vkykpukRed [kk tk ubldk iek.k fn;k gA ,d lLrk Hkk tu lkr tk ,d cMh tul[;k dk iV Hkj ldrk g tk viuh vkt hfodk d fy, cgr de [kp dj ldrk g mUgku bldk okLro e of'Okd :lk e Lokxr fd;kA mPp [kk] eY; d l kFk vKkr ikni iUk fuEure eY; ij vkt d le; dh ekx g] vko'; d ik"kd k l kFk Hkk tu miyC/k djoku d vfrfjDr piUkk ikVhu db vu; ok;n Hkh djrk gA vr% ,d u; ikni dk iUkk ikVhu nkuk ¼, yihl, l ½ d fy, {kerkoku lkr d :lk e Kkr dju rFkk mUkj ioh {k= l p;fur itkfr;k l mPp [kk] eY; k d l kFk ,yihl, l r;kjh o"kk ou vulU/kku lLFkk] tjkjgV }jkj dh xb g] D;kfd ifj;ktuk dk vif{kr vKv iV ,yihl, l d mRiknu d fy, u; ikni rFkk mud [kk] eY;k dk eY;kdu dju d fy, uk fofHkUu ikni itkfr;k ;Fkk& lEcd l t kofud ¼dijh Qkyfl;k½ ,VhMlek C;fu;l ¼; igkj ck;fl t ½] ,ykdf l;k eØkjbt k ¼,jkfl;k½ fl l vl ,MukV k ¼ohVkf l;k½ fl l;l j;U l ¼ohVkf l;k½] ,ugkbMk Qydvul ¼,LVjjfl;k½ feek l k buof l;k ¼Qck l h;k½ fMiyft;k,e , l dykUve ¼,Fkhjhf'k;k½ rFkk lkekfu;k leu vle l ukbVktu vkdyu d fy, p;fur dh xBA Dtiny i)fr dk mi;kx djr g, p;fur ikni itkfr;k dk ukbVktu@ikVhu rOk d fy, tkpk x;kA bu ikni iUkk e ukbVktu rO 1-73 l ydj 3-62 rd dh jt rd fu/kkfjr fd; x;A ,yihl mRiknu {kerk dk tkuu d fy, bu itkfr;k d rkt iUkk l ,yihl, l r;kj dh xBA Qyk dh i)fr dk vulj.k djr g, mijkDr vfHkfyf[kr itkfr;k dh ifUk;k ¼100 x Lrj½ ,yihl r;kj dju gr mi;kx fd; x;A ,yihl r;kj dju gr mi;kx fd; x; ,yihl dh vf/kdre mit fMiyft;k,e , l dykUve] ,ykdf l;k eØkjbt k rFkk lkekfu;k leu l ikr dh xBA vr% ,; itkfr;k ,y,e@,yihl, l

mRiknu rFkk mud Hkkfrd jk l k;fud fo'y" k.k d fy, p;fur dh xb gA ,yihl dh mit c<ku d fy, fMiyft;k,e , l dykUve d fy, lokUke rkieku rFkk ih,p voLFkk, b"Vehdr dh xBA ,ykdf l;k eØkjbt k l ,yihl mit mRiknu d fy, lokUke rkieku b"Vehdr fd;k x;kA fMiyft;k,e itkfr l iUkk ikVhu nkuk i;kx'kkyk LRk ij r;kj fd;k x;k rFkk ekud jk l k;fud i)fr;k dk mi;kx djr g, ueh] jk[k] dPpk Qkbcj] dPpk ikVhu bFkj fu"d" k.k ukbVktu eDr fu"d" k.k d fy, fo'yf'kr fd;k x;kA

tixh [kk] iknik dk ik"kd LRk] txyh [kk] iknik ij lpuk dk iy[ku dju d fy, ,d i'ukoyh fodflr dh xb rFkk txyh [kk] iknik d iy[ku d fy, i;kx dh xBA bl fo" k; ij lpuk fgepy in'k d fofHkUu {k=k t l fdUukj ;Fkk& cklik ?kkVh ¼j{ke} fprdy] crljh] pku l rFkk ckfjx lfju½ fupkj {k= ¼fupkj] uuxuh] d' i] xkjng rFkk ckjh½ jkik ?kkVh ¼; k l] fx;ckx½ : ih ?kkVh ¼etxko] ukfyx-i xjxjh] f'kxkjpk] g:v k½ rFkk lryt ?kkVh ¼dkYik] ikxh] vDik] txh] fjLi] fyl;k] vkljx] jkx] ycjx rFkk ig rFkk ekc½ fty d rhuk Cykd k dk doj djr g, ,df=r dh xBA txyh [kk] iknik dk iy[ku dju d fy, dy 178 ykx dk mi;Dr xkek e l k{kkRdkj fd;k x;k rFkk 110 txyh [kk] ikni itkfr;k iyf[kr dh xBA [kk] iknik e Qy ¼33%½ rFkk iUk ¼27%½ lcl vf/kd mi;kx fd; x; ikni Hkkx g rFkk mld lk'pkr tM rFkk Qyu Hkkx Øe'k 11% l 6% gA [kk] iknik d Hkhrj tMh cVh ¼58%½ rFkk >lfM;k ¼22%½ lcl T;knk mi;kx dh xb of) :lk rFkk mld lk'pkr 16% ij o{k gA ikni ifjokj d jkt fl;k ¼15 itkfr;k½] ikyh xkuf'k;k ¼6 itkfr;k½ rFkk lDlhYxf l;k ¼6 itkfr;k½ fdUukj fty e egRoi.k txyh [kk] ikni ifjokj gA lcl vf/kd oj;rk ikr txyh ikni itkfr;k dk oj;rk nu d fy, ijkeiVjk dk fofHkUu Hkkj l kix;k t l ikni dk mi;kx dju oky ykxk dh l[k] ekleh] miyC/krk] ipjrk] cktkj dh 0;kidr rFkk ik"kd fo'y" k.k d fy, ikjEifjd mi;kx rFkk itkfr;k dk ikFkfedrk nh xBA



ikFkfedr k ,yxU/ ,EchykV] ekyl cdKv rFk jkt och; kuk] fgiki lyhQkfy; k rFk cjchfj/ ,fj/VkV d Qy ueu ik"kd fo'y" k. k d fy, ,df=r fd; x; A dy ih, p ,ldkjfed ,fIM] feujy U; VjhiUV] dkckgkbMV dy phuh rFk ,VhvDLkhMV fØ; kdyki dk vkdyu fd; k x; kA i.k/kkfj; k e vul/kku [kkt k dk ipkj dju d fy, txyh [kk] i knik ij nk loknRed dk; "kkyk, vk; kftr dh xb rFk [kk] i knik ij ykxk e tkx: drk mRiUu dju d fy, ,d ipkj ifLRkd r; kj dh xBA

vk" k/kh; i knik d; lfØ; fl) kUr% [krh d v/khu dN 0; klfjd : lk l egRi. k vk" k/kh; i knik e lfØ; fl) kUr dh ek=k dk iHkkfor dj jg ?kVdk ij v/; ; u ou mRikndr lLFkku jkph e ikjEHk fd; k x; kA ikdfrd lkrk l th-flyoLVj d ikixyhl d ,d=h dj. k d fy, nk LFkyk dk vfHkKkr fd; k x; kA th-flyoLVj d l [k iÜk iVkyf; e bFkj d lFk okl jfgr fd; x; % cu thu rFk DykjQke lRo rhu o"kh; i knik d iÜkk l r; kj fd; x; A th- flyoLVj i knik dk lxxku] l ky rFk fll dh Nk; k d v/khu mxk; k x; kA

2-6-5- tlo bi/ku rFk tlo mt k

tlo bFkkuky mRiknu% ou vulU/kku lLFkku] ngjknu e ck; kbFkkuky mRiknu d fy, dy y?kd kjd 'kdjk dk c<ku d fy, fyXukl yykf l d to it d vi?kVu ij mUur dk; l Ecu/kh ijkehVjk d iHkko dk n [kk x; kA vk lUu jkl k; fud fo'y" k. k dk vul j. k d jr g, rFk yUVkuk dekjk rFk phM d d. k vkdkj dk b"Vehdj. k djd fuEure rkieku ij fofHkUu vEy@, ydkyh dk mi; kx d jr g, dy y?kd kjd 'kdjk d vf/kdre fu"d" k. k d fy, dPph l kexh dk ckn e ty vi?kVu dj; k x; kA i. k ty vi?kVu d nkjku dy fu"d" kr y?kd kjd 'kdjk 120° l 90 feuV e 9-27 g/l (5.69 %) FkA yUVkuk dekjk d ekey e 1% NaOH d pkt d lFk FkA tcf d phM lph d ekey e leku ifrfØ; k volFk vk d v/khu PkhM lph d ekey e ; g 8-27 g/l (4.96%) FkA ijku nf"kr yUVkuk dekjk gkbMkykbtV l [kehj d iFkddr txyh LVu dk

[kehj fu"d" k. k i iVku MDIVjkt vxkj ij 30° l ij dYpj fd; k x; k rFk fd.kou {kerk rFk fd.ourk dk fu/kkj. k dju d fy, xydkt d fo:) ijhf{kr fd; k x; kA fd.ou d i; kxk u igy l mi; kx dh xb fdf.or [kehj ¼ lDpkjekbl djokbl ½ d fo:) 85% fd.o.krk {kerk d lFk 11-15g/l bFkkuky fn [kk; k ft lu 80% fd.ou {kerk d lFk 10-31 g/l bFkkuky mRiUu fd; kA

dk"Bh; tlo it l Dyhu ikM; l j xl dk mRiknu% dk"B foKku ,o ik lfxdh lLFkku] cxykj e b/ku {kerk dk c<ku d fy, dk"B vof" k"Vl l ikM; l j xl dk lQ dju d fy, i; kx fd; kA to it xldhj. k d fy, dk"B fpl l] ck l fpl l rFk cjkn dk vkou 'kf"dr fd; k x; kA dk"B fpl l] ck l fpl l rFk vkjk /ky l mRiUu ikM; l j xl dk fo'y" kr fd; k x; kA ijhf{kr ifj. kkek u fn [kk; k fd dk"B vif" k"Vl dh ryuk e ck l vif" k"Vl e dkc u ekuk vkD l kbM rFk gkbMk tu dh mPp mit



x l hQk; j



ikM; l j xl



g ¼dk"B vif"K"V l nk x.kk vf/kd½ tk fd ikM; l j
xl d e[; ?kVd gA ck l dk xlhdj.k eY;kdu
mRiknk dh ,d jt t l pkj dky rFkk lfØ;dr jr
dk mi;kx dj d ikM; l j xl dk l kQ fd;k x;k
rFkk bl l kQ dh xbA xl dk th l h d l kFk Hkh
ijhf{kr fd;k x;k; kA

ikxfe;k fiUukV ¼, y½ cht riy dk fu"d"K.k
rFkk Vkl l LVjhfQd'ku% ikxfe;k fiUukV cht
l ry fu"d"K.k ij ekbØkoo fofdj.k d iHkko dk
v/;;u fd;k x;k; kA ;g voykfd r fd;k x;k fd
ekbØkoo fofdj.k egRoi.k :lk l cht k l
ry fu"d"K.k d le; dk de djrk gA
Vkl l LVjhfQd'ku ij ekbØkoo fofdj.k d iHkko
dk tkpk x;k; k rFkk ikjEifjd rkid l ryuk dh
xbA ekbØkoo d v/khu Vkl l LVjhfQd'ku le;
egRoi.k :lk l de gkrk gA ifØ;k voLFkvvk dk
b"Vrehdj.k t l mRi d ,dkxrk rFkk rkieku
ixfr v/khu gA

ck l l :pkj dky mRiknu% e?kky;] fetkje rFkk
ef.kij d Hkxk e pkj dky mRiknu i;kx ij fd;
x;A vf/kdk'k nkjk fd; x, LFkyk l Kkr gvk fd
LFkkuh; ykx ikjEifjd xMMk i)fr ;k mld
l l d j.k dk pkj dky mRiUu dju d fy, mi;kx
dj r g tk idk"B utnhdh ou {k=k l ,df=r
fd;k x;k; k gkrk gA vl;fer] vlko/kku idk"B
ikru ou {k= rFkk vkPNknu dk fl dMu dh vkj y
tkrk gA rkexy kx] ef.kij l ck l pkj dky dh
fijkv d vfrfjDr iR;d pkj dky d mRiknu d
fy, fd l h Hkh ou idk"B dk i;kx dj r gA ck l
ueu& cEc l k VYMk] cEc l k ckYdvk dk ,df=r
fd;k x;k; k] vkdkj fn;k x;k; k vkj ikbjkykbf l l d
fy, r;kj fd;k x;k; kA ,Y;fefu; i)fr dk i;kx
dj d ikjEifjd v/;;u d fy, cEc l k cEc l
ch-ikYyhMk] ch-ckydvk] ch- VYMk rFkk ,e-c l hQjk
l dN pkj dky ueu i;kx'kkyk e r;kj fd; x;
rFkk dN pkj dky dh dyhjhQd mi;kfxrk n[kh
xbA Me vkikd bV vkikd rFkk l kyj 'k"du d{k
dk vfre :lk inku fd;k x;k; kA ft le l Me vkikd
dk QchdV fd;k x;k; kA



e?kky; e ijEijkr rkj dky dh cukoV



e?kky; e ik;jkyf l l d lk'pkr dk"B pkj dky

tV kQk l :to riy% tV kQk dj d l d lefdr
fodkl ij jk"Vh; uVod dk; Øe gkFk e fy;k
x;k gA

uVofdx ij h{k.k I LFky ij h{k.k e fo/k; u {k= e
bykgckn dh fuEudr flfydk [kukuk LFky ij
33-56% rFkk 30-66% ry rRo d l kFk cgLFk fud
ij h{k.k e cht mit d fy, thuk Vkb i vd kyk
¼ihdoht&,ed;½ rFkk iht ly&2 u vPNk in'ku
fd;kA ;g l Hkxh; ij h{k.k e ik;k x;k fd
l h, l, Qbv kj u lokUke in'ku fd;k rFkk mld
lk'pkr >k l h jgk ¼, uvkj l ht&42% A

uVofdx ij h{k.k II bykgckn l
l h ih Vh, l l h, ,y Mh& 13 rFkk l h, ,y Mh&14
u of) rFkk cht mit u vPNk in'ku fd;kA vPN
ry RkRok d l kFk 323% 385 fdxk@g dh jt e
vkl r cht mit d l kFk bykgckn d nk l hihVh, l
nofj;k d ,d l hihVh rFkk xkj[kij d



ef.kij e dk"B pkjdy cktkj



pkjdy d fy, u;h fMtkbu dh xb Me HkVVh

rhu l hihVh, l u cht mit e vPNk in'ku fd; kA 211-13 rFkk 45-45 leh dh mi; kfxrk d l kFk vU; l rfr; k l bykgckn d l hihVh, l e 0; k l rFkk 'kh" k 0; k l vf/kdre Fkka

uVofdx ijh{k.k III% mR l go/kd thuk V kbi ftue 33% l vf/kd ry rRo Fkk l gHkxh l LFkkuk rFkk dUnk } kjk fn; x; A l h, l , Qbv kj bykgckn u fofHkUu l LFkkuk@dUnk l dy 16 mnxelFky iklr fd; A l h, l , Qbv kj bykgckn u Hkh l nL; l LFkkuk dk l h, , yMh&14 u ueu fn; A v d j mxk; x; rFkk ifMyk e LFky ijh{k.k fd; x; A fujkb dnky pykuk rFkk uVofdx ijh{k.k dk j[kj[kko ixfr ij gA fujkb , d QhV dh vfHkfyf[kr dh xBA of) 'kk[ku rFkk Qyu vkdM vfHkfyf[kr fd; x; A vko'; drk d vulkj LFky ijh{k.k dk j[kj[kko rFkk icU/ku fd; k x; kA

tV kQk rFkk d j t dk lefdr fodk l %

tV kQk e/; in'k d fofHkUu df" k tyok; oh; {k=k l 175 l hihVh, l p; fur fd; x; A 20 l rfr iR; d

vdk"B ou mit

d l kFk nk l rfr ijh{k.k fNnokMk rFkk ckjkg] tcyij d LFkkfir fd; x; A l rfr ijh{k.k e iVuk] lruk] [k[kkuh] Vejhdkyk] fx l kuh f'koijh&2] fx l kuh f'koijh&3 rFkk Xokfy; j&2 l rfr vPNk in'ku dj jgh g Øe'k 22 rFkk 14 , 'kk'kuk d l kFk jk"Vh; ou l Hkxh; ijh{k.k d : l k e cgLFkkfud ijh{k.k l LFkku ifj l j e LFkkfir fd; x; A jk"Vh; ijh{k.k e TFRI-1 rFkk 2, IGAU-1, TNMC-22, PDKV-1 rFkk 2, TNMC-7, ikeyeij-I, RJ-92, JCP-2, NRCJ-17 rFkk TNJC-19 , 'k'ku of) in'ku] Qy mit cht pfj= rFkk ry rRok d vk/kkj ij vPNk in'ku dj jg gA l Hkxh; ijh{k.k e] TFRI-1, TFRI-2, PDKV-1, IGAU-2, PDKV-2 rFkk PDKV-1 vPNk in'ku dj jg gA 20 xke ; fj; k] 120xke SSP rFkk 120 xke MOP dh dh mojd ek=k d l kFk tykb d egu e 2X2 eh rFkk 3X2 eh d vUrjky ij xMMk e jkfir (30X30X30 cm) fd; x; A i knik u e/; in'k e m".kdfVcu/kh; voLFkkvk u vPNh of) fn[kkba

d j t % e/; in'k d fofHkUu df" k tyok; oh; {k=k l 81 dUMhMV /ku o{k p; fur fd; x; A 20 l rfr; k d l kFk ckyk?kkV] e/; in'k] e l rfr ijh{k.k LFkkfir fd; x; A d'keyh] fNnokMk] f'k[kjij] fNnokMk rFkk ykyij l rUkk e l rfr vPNh ikb xBA Øe'k 5 rFkk 7 , 'k'ku l d l kFk jk"Vh; rFkk l Hkxh; ijh{k.k l LFkku ifj l j e LFkkfir fd; x; A jk"Vh; ijh{k.k e TNMP-14 rFkk RAK-5 , 'k'ku l vPNk in'ku dj jg FkA l Hkxh; ijh{k.k e IGAU-1, CCSHAU-1, IGAU-5, NRCAF-2, JNKVV-29 rFkk JNKVV-15 vPNk in'ku dj jg FkA l Hkxh; ijh{k.k l i"i.k rFkk Qyu NRCAF > k l h , 'k'ku e n[k x; A l Hkh ijh{k.k dk tc vko'; drk gb fu; fer fujkb rFkk dnky fØ; k dykik rFkk flp kb d l kFk ikf"kr fd; k x; kA

tV kQk d j d l dk cgLFkkfud ijh{k.k tV kQk d j d l d uk mRd"V , 'k'ku d l kFk cgLFkkfud ijh{k.k rFkk 19 v'k'ku v/k&flc l rfr ijh{k.k l LFkku d ifj l j e Øe'k vDVcj 2008 rFkk tykb 2009 e LFkkfir fd; k x; kA ijh{k.k vPNk in'ku dj



जग रफक मंजुतर्फ 85% ल वफ/क ग अ) एक त ल यकक] दय 0; क ल 'क [ककवक ध ल [; क] 'i.क] धवक रफक जकक ध ?कवुक, 'ij fu;fer voykdu =ekf l d vk/kkj 'ij vfhkfyf[kr fd; x; rFkk vk dM l dyu d fy, ck; kVd ikd] y[kuÅ Hk t x, A 'ijh{k.k dk tc vko'; drk gb rc vko'; d fl pkb rFkk j[kj[kko miyC/k djok; k x; kA cgLFkkfud 'ijh{k.k e nk, 'k'ku l HAP 41 rFkk HAP 44 (HNB, x<oky) u fcuk NVkb d mPpre 'kk[kk, mRiUuk dh %NVkb dh vko'; drk ugh, l k l dr d jr g, %A l Hkh, 'k'kuk e fl rEcj&vDrcj 2010 e 'i.k voykfd r fd; k x; kA l Hkh, 'k'kuk e Qy cu% JA-9, NBRI, y[kuÅ (10 Qyu), JA-126, NBRI, y[kuÅ (85 Qyu), JA-139, NBRI, y[kuÅ (33 Qyu), BTP-U, BTP, y[kuÅ (4 Qyu), HAP 41, HNB, x<oky (130 Qyu), HAP 42, ,p, uch x<oky (36 Qyu) rFkk ,p, ih& 44, ,p, uch x<oky (74 Qyu) A fofHkUu, 'k'kuk e ry ifr'kr rk 25-38% rd fHkUu FkhA v/k&flc l rfr 'ijh{k.k e 'i.k fl rEcj&vDrcj 2010 e fuEufyf[kr, 'k'kuk d n[kk x; kA JA-9, JA-18 (NBRI, y[kuÅ), MSSRF-10, MSSRF- 16, MSSRF- 51(MSSRF, fpUub), HAP- 41 and HAP- 44 (,p, ih) x<oky) A gkykfd Qyu JA-!8, MSSRF-10, MSSRF-51, 'k'kuk l lEcU/kr i knik e n[kk x; kA Qjoh 2011 e cgLFkkfud 'ijh{k.k dh n l jh NVkb rFkk v/k&flc l rfr dh igyh NVkb dh xBA ueh [kku dk jkdu d fy, ekg ekp 2011 e nkuk 'ijh{k.k e eyfpx dh xBA i; kxkRed 'ijh{k.k dk Hkyh idkj l icfU/kr rFkk ikf'kr fd; k x; kA

l k mRd"V, 'k'kuk okyk uVod l k>h nkjk l iklr, d cgLFkkfud 'ijh{k.k thvkj l h Qke gkÅ l l hrk ign] tcyij e tykb vxLr 2010 e LFkkr fd; k x; kA vkjchMh dk vulj.k d jr g, pkj ifrdr; k d l kFk i; kx dk LFkkr fd; k x; kA i; kxkRed LFky dk 400 leku vkdkj d lykV k e

ckV k x; k rFkk 3eh x 3eh d vUrjky 'ij ifr lykV 9 i kni jkfr fd; x; A 'ijh{k.k vPNk in'ku dj jg g rFkk mंजुतर्फ 90% ल वफ/क ग अ) एक त ल Åpkb] दय 0; क ल 'क [ककवक ध ल [; क] 'i.k dhV rFkk jkxk dh ?कवुक 'ij fu;fer voykdu =ekf l d vk/kkj 'ij vfhkfyf[kr fd; x; rFkk l dyu d fy, ck; kVd] ikd y[kuÅ Hk t x, A i; kxkRed jki.k dk cgr /; ku l ikf'kr rFkk icfU/kr fd; k x; k g rkfd mPp Qy mRiknu okyh, d vPNh Qly mxkb tk l dA

p; u in'ku 'ijh{k.k dk lo{k.k fd; k x; k rFkk tV kQk djd l dh mit {kerk dk vkdyu jktLFkku rFkk xtjkr e fd; k x; kA 30 dUMhMM /ku o{k dh vkjchMh e, dy i kni ifr ifrdr d l kFk nk l rfr 'ijh{k.k, d vkQjh] tk/kij e 5 ifrdr; k d l kFk rFkk n l jk 15 ifrdr; k d l kFk] gYn?kkVh] mn; ij e LFky e mंजुतर्फ ifr'kr 40 l 100 rd fHkUu FkhA l h, l, elhvkjb&1] e vf/kdre vklr Åpkb] 'kk[kkv k dh l [; k] rFkk dkyj 0; क ल 247-5 leh] 5-50 rFkk 10-59 leh voykfd r fd; k x; k t cfd fuEure Øe'k 117.00 leh, 1.80 and 3.98 leh, EL-19 vkQjh-17 e FkA l h, l, elhvkjvkb e vf/kdre i kni Åpkb 111-43 leh Fkh t cfd EL- vkQjh 15 e 'kk[kkv k dh l [; k rFkk dkyj 0; क ल 2-50 rFkk 3-89 leh FkA 94] vkQjh&8 e vf/kdre i kni Åpkb rFkk dkyj 0; क ल 67-50 rFkk 1-81 leh Fk rFkk 142&vkQjh&12 e 'kk[kkv k dh l [; क 1-00 FkhA vkQjh tk/kij LFky e dUMhMV /ku o{k u doy Qy rFkk cht mit k, t cfd gYn?kkVh] mn; ij e dkb 'i.k@Qyu ugh n[kk x; kA fofHkUu d fo'y" k. k e n'kk; k fd vkQjh tk/kij 'ijh{k.k e 0-01 0; ogk; rk Lrj 'ij 'kk[kkv k dh l [; क egRoi.k Fkh t cfd] 'k" k of) ijkehVj nkuk gh LFkyk ij egRoi.k ugh FkA

cht mit leh d j. k fodflr dju d fy, o" k 2010&11 d nkjku ekfr; k vulU/kku Qke]



jt ihiyk $\frac{1}{2}xtjkr\frac{1}{2}$ e t- *djdI* d nk ueuk
Hk[k.Mk e eki fd;k x;kA dy vklr Åpkb] vklr
dkyj 0;kI] rFkk vklr 'kh" k pkMkb Øe'k 2-44 eh
I ydj 2-92 eh rd] 12-92 leh I 14-2 leh rFkk
2-15eh I 2-41eh rd FkA cht mit ij voykdu
fd;k x;k tk fd 103-0 xke I 193 xke rd fhkUu
FkA ifrxeu cht mit rFkk Åpkb d chp rFkk SY
rFkk CD d chp lc/k ink dj l d kA nk fofhku
lc/k , d LN (SY) vs. 1/HT or 1/CD, vU; SY vs.
HT or CD. ou lehdj.kk ij vk/kkfjr voykfdr
cht mit dk ifjdfr fd;k x;kA lehdj.k tk
vkdM d utndh eY; nrh g ij fopkj fd;k tk
l drk gA ; g l kQ g fd SRT rFkk BCR dh ryuk e
CSMCRI Dyku vPN g vkj SRT rFkk BCR dh
ryuk e vf/kd Åpkb rFkk cht mit g tcf
mudh vk; d 4 o" k g tcf ART rFkk BCR doy
6 o" k d gA

o" k 2010&11 d nkjku efr;k vul/kku Qe
ij nk Hk[k.Mk $\frac{1}{4}4\&6$ o" k $\frac{1}{2}$ I vfhkfyf[kr vkdMk d
vk/kkj ij mit lehdj.k bl çdkj fodflr gvA
SY(1) = -165.55 + 120.9868 * HT
SY(2) = 844.0604 - 51.8072 * CD
LN(SY(1)) = 7.145631 - 5.60393 * 1/HT
LNSY(2) = -0.13976 + 68.55505 * 1/CD

TkV kQk djdI d cgLFk fud Dykuh; ij h{k.k
rFkk v d j cht m|ku vkQjh tk/kij d }kj
gYn?kkVh mn; ij e nk cgLFk fud Dykuh; LFky
ij h{k.k LFk f r fd; x; A igyk ij h{k.k 12 , 'kk' kuk
d l kFk uoEcj 2007 e rFkk n l jk Dykuh; ij h{k.k
8 , 'k' kuk d l kFk f l rEcj 2008 e pkj ifr dfr; k d
l kFk RBD e LFk f r fd; k x; kA vkQjh e
5 ifr dfr; k d Lk kFk jUMkekb tM Oykd fM tkbu e
rFkk gYn?kkVh mn; ij e 15 ifr dfr; k d l kFk v d j
cht ckxku LFk f r fd; x; A

ij h{k.k-I u n'kk; k fd ifr'krk mÜkj t hfork
15 I 56% rd fhkUu FkA TERI/DBT/Jat/04-05 e
vklr ikni Åpkb rFkk dkyj 0;kI dk mPpre

eY; Øe'k 124-17 leh rFkk 4-62 voykfdr fd;k
x;kA tcf BTR-K e vklr 'kk[kkvk dh I [; k
1-69 Fkk] tcf of) d 40 eghuk lk'pkr vklr
ikni Åpkb] 'kk[kkvk dh I [; k rFkk dkyj 0;kI dk
fuEure eY; 72-73 leh] 1-03 rFkk 1-87 leh Øe'k
TERI/DBT-Jat/06/10, TERI/DBT-Jat/06/05-
06/12 rFkk TERI/DBT-Jat/06/16 e voykfdr dh
xbA l Hkh rhuk ijkehVjk d fy, vkdM egroi.k
ugh FkA

Dykuy ij h{k.k&II e] ifr'kr mÜkj t hfork
0 I ydj 22 ifr'kr rd fhkUu FkA NBRI-JA-126
e vklr ikni Åpkb rFkk dkyj 0;kI dk vf/kdre
eY; 78-75 leh rFkk 2-94 leh n[kk x; k] tcf J-2
fgl kj e vf/kdre 'kk[kkvk dh I [; k 1-50 FkA gkykfd
ikni Åpkb] 'kk[kkvk dh I [; k rFkk dkyj 0;kI dk
fuEure eY; J-2 fgl kj rFkk HS-42 e 47-50 leh]
HS-41 e 1-00 rFkk HS-44 e 2.21 leh FkA

vkQjh] tk/kij e ifr'kr mÜkj t hfork 0 I
 $\frac{1}{4}N$, 'k' kuk e $\frac{1}{2}$ 100 ifr'kr $\frac{1}{4}6$, 'k' kuk $\frac{1}{2}$ rd fhkUu FkA
, 'k' ku TERI/DBT/JATROPHA/01/15 u vf/kdre
ikni Åpkb rFkk dkyj 0;kI (Øe'k 26-00 leh
rFkk 9-13 leh fn[kk; k tcf fuEure ikni
Åpkb rFkk dkyj 0;kI 136-70 , 'k' ku TERI/DBT
JATROPHA/05/31 rFkk TERI/DBT-JATROPHA/
05/87 n[kk x; k rFkk TERI/DBT-JATROPHA/
05/58 , 'k' ku e 2.76 leh n[kk x; k vklr 'kk[kkvk
dh I [; k 1-00 I 5-00 rd fhkUu FkA 166 dUMhMV
/ku o{kk e I vkQjh] tk/kij LFky doy
12 dUMhMV /ku o{kk e cht vk; tk fd 4-72 xke I
135-26 xke rd FkA

gYn?kkVh mn; ij LFky e mÜkj t hfork
vf/kdre 20% I 80% rd fhkUu FkA ikni Åpkb]
'kk[kkvk dh I [; k] rFkk dkyj 0;kI voykfdr
fd;k x;kA 140-71 leh] 2-75 rFkk 4-47 Øe'k
, 'k' ku TERI/DBT-JATROPHA/04/16,
TERI/DBT-JATROPHA/05/53 rFkk TERI/DBT-
JATROPHA/07/05-06/37 vf/kdre ikni Åpkb
TERI/DBT-JATROPHA/04/31 , 'k' ku }kj fn[kkb



xb 451-00 leh^{1/2} tcf d , 'k'ku TERI/DBT-JATROPHA/05/26 u fuEure 'kk[^{kk}, rFkk Øe'^{kk} 1-00 rFkk 1-74 leh dk dkyj 0; k l fn[^{kk}; kA o''k 2010&2011 d nkju gYn?kkVh] mn; ij LFkyk ij dkb Qyu ugh n[^{kk} x; kA

voykduk u n''kk; k fd vkQjh] tk/kij e jki.kk u gYn?kkVh] mn; ij l of) ijkeiVjk d l nHk e vPNk in'ku fd; k] tcf d mn; ij LFky e jkfir , 'k'kuk u tk/kij LFky dh ryuk e vf/kd vPNh mÜkj t hfork fn[^{kk}BA l Hkh ijkeiVjk d fy, vkdMk egRoi .k ugh FkkA

vudiyu'khyrk rFkk riy mit d fy, tV^{Qk}Qk djd l dk vkuof'kdh l/kkj% of) vof/k d 65 eghuk d lk'pkr 'k''d voLFkkvk d v/khu 18 p; fur dyhu , 'k'kuk dh mÜkj t hfork 6 l 69 ifr'kr rd fhkUu FkhA l Ei .k vklr ikni Åpkb] 'kk[^{kk}vk dh l [; k rFkk dkyj 0; k l Øe'^{kk} 135.00 l 226.67 leh, 1.00 l 4.50 rFkk 3.83 l 8.26 leh rd fhkUu FkkA cht mit fcuk cht l ydj 660-00 xke ifr ikni FkhA

'k''d voLFkkvk d v/khu of) vof/k d 54 eghuk lk'pkr 63 n'kh , 'k'kuk dk in'ku 33 l 100 ifr'kr rd FkhA tcf d vklr ikni Åpkb] 'kk[^{kk}vk dh l [; k rFkk dkyj 0; k l 155.0 l 295.0 leh, 1.00 l 4.00 rFkk 4.55 l 12.55 leh rd fhkUu FkkA cht mRiknu 0-00 l 313-0 xke ifr ikni rd fhkUu FkkA LFky d , d flj l n l j flj rd d in'ku d vk/kkj ij] 14 , 'k'ku p; fur fd; x; A

vUrjky ijh{k.k e ifr'kr mÜkj t hfork 44 eghuk d lk'pkr 2ehx2eh e 14% l ydj 3eh x 3eh 39% rd fhkUu FkhA vf/kdre vklr ikni Åpkb 4200-22 leh^{1/2} 4ehx 4eh vUrjky mipkj e n[kh xb] tcf d 'kk[^{kk}vk dh l [; k rFkk dkyj 0; k l 3eh x 3eh vUrjky e vf/kdre 3-08 rFkk 5-76 leh FkkA fuEure ikni Åpkb] 'kk[^{kk}vk dh l [; k rFkk dkyj 0; k l 179-90 leh] 2-00 rFkk 5-24 leh 2ehx2eh vUrjky e voykfd r dh xBA vkdM l Hkh ijkeiVjk d fy, egRoi .k ugh FkA

NVuh ijh{k.k e ifr'kr mÜkj t hfork T₂ l 30% ifr'kr l T 46% e rd FkhA vklr ikni Åpkb rFkk dkyj 0; k l Øe'^{kk} 151-81 leh (T2) l 158.58 leh (T3) rFkk 5.42 leh (T2) l 5.59 leh (T0) rd FkhA tcf d vklr 'kk[^{kk}vk dh l [; k 3-87 fu; f=r e (T0) l 8-96 (T2) rd gA o''k 2010&11 d nkju dkb Qyu voykfd r ugh fd; k x; kA fofo/krk d fo'y''k.k u l > k; k fd 'kk[^{kk}vk dh l [; k d fy, NVkb dk iHkko egRoi .k g] tcf d mipkj dju d 37 eghuk d lk'pkr vklr ikni Åpkb rFkk dkyj 0; k l d fy, bldk dkb egRo ugh FkkA

e[; Hk[k.M fo'y''k.k d ifj.kke l 4flpkb iHkko^{1/2} T₂ e vklr ikni Åpkb 233-11 leh Fkh 430 fnuk e^{1/2} rFkk vf/kdre T₂ e 270-17 leh Hkh 415 fnuk^{1/2} vf/kdre 'kk[^{kk}vk dh l [; k rFkk dkyj 0; k l T₂ rFkk T₁ e Øe'^{kk} 4-45 rFkk 9-65 leh voykfd r fd; k x; k] tcf d fu; f=r e ; g fuEure Øe'^{kk} 3-30 rFkk 8-59 leh n[^{kk} x; kA rhu flpkb mipkj lykV fu; f=r d vrfjDr ck, x; tk fd T₃ e 31-8 xke ifr ikni 445 fnuk e^{1/2} l ydj T₂ e 81-0 xke ifr ikni rd rFkk mld lk'pkr T₁ mipkj e 76-4 xke rd FkkA flpkb l doy ikni Åpkb egRoi .k : lk l iHkfor gb tcf d flpkb l 'kk[^{kk}vk dh l [; k rFkk dkyj 0; k l viHkfor jgA mojdk d fy, mi&Hk[k.M fo'y''k.k l 4F₁ vkxfud [kkn 2 fdxk@xMMk(F₂ vkxfud [kkn 5 fdxk@xMMk(F₃ 4ukbVktu 10 xke \$ ih] 20 xke] K, 10 xk ifr xMMk(F₄ 2 fd xk vkxfud [kkn\$ukbVktu 10 xke \$ ih] 20 xke] K, 10 xk^{1/2} ifr xMMk ifj.kkek l Kkr gvkd vklr ikni Åpkb 237-50 leh F₂ l ydj 253-85 leh F₃ rd FkhA vklr "kk[^{kk}vk dh l [; k rFkk dkyj 0; k l F₄ e vf/kdre 4-00 rFkk 10-31 leh rFkk fuEure Øe'^{kk} 3-62 rFkk 7-69 leh F₁ e voykfd r fd; k x; kA l Hkh mojd mipkfjr lykV d cht ck; k x; kA tk fd F₀ e 22-5 xke l F₂ mipkj rd 58-0 xke FkhA ikni of) in''ku egRoi .k : lk l mojdk l iHkfor ugh FkkA jki.k d 49 eghu d lk'pkr tV^{Qk}Qk d of) in''ku ij flpkb rFkk mojdk u dkb egRoi .k iHkko ugh fn[^{kk}; k gA



o{k tfur ry chtk ij vkdMk vk/kkj%
iVkyf;e inkFkk dh ekx rFkk dher cMh rth l c<
jgh g] ;ktuk vk;kx 20% tVQk rFkk vU; Vhchvk
vk/kkfjr Mhty d l kFk fefJr mPp xfr Mhty dk
mRikfnr dju dh lHkkouk dk ij[kk jgk gA ;g
ifj;ktuk Vhchvk,l d Kku vk/kkj dk mudh
oreku miyC/krk rFkk Hkfo"; e vkifr e ;kxnu
dk vkdyu dju ekx fo"y'.k rFkk Hkkjr dh
xkeh.k vFk0;oLFkk e ;kxnu dk vkdyu dju d
mn"; l ikjEHk dh xb gA bl ifj;ktuk dk
mn"; xtjkr rFkk jktLFkku e Qy g,) Vhchvk
jki.kk dk iy[ku djuk g tk ljdkjh lLFkvvk]
vul/kku lLFkvvk bR;kfn }kjk fd; x; g rFkk
bld rho l/kkj d fy, vkdMk vk/kkj fodflr
djuk gA

xtjkr rFkk jktLFkku l lkr o{k tfur ry
cht itkfr;k dh [krh d jkT;okj {k= dk vkdyu
dju d fy, ljdkjh foHkxk@lLFkvvk dh t l
jkT; ou foHkxk] cKxokuh] df"k foHkxk] jy foHkx
rFkk xj ljdkjh dh ,d foLrr lph vkQjh] tk/kij
}kjk r;kj dh xb gA vkdMk l dyu d fy, ik:l
fodflr fd;k x;k rFkk foHkUu foHkxk dk Hktk
x;kA bl v/;;u d v/khu lkr Vhchvk t l tVQk
¼tVQk djd l ½] djt ¼ikxfe;k fiUukV½] uhe
¼vtKMhJDV½ bfmD½] egvk ¼e/kd bfmD½] vke
¼exhQjk bfmD½] djuhy ,l QhM] tktck
¼f lEeUMf l;k pkbuh l h l ½ rFkk fiy ¼lYokMjk
itkfr½ tk fd vkQjh d vf/kdkj {k= e g] ,df=r
rFkk ldfyr dh xBA

tVQk djd l ,y d: cht lkr% fgeky;u ou
vulU/kku lLFkku] f'keyk }kjk fgeky in'k d
fukEu rFkk e/; fgeky;u {k=k l chtk dk v/;;u
fd;k x;kA 29 cht lkrk rFkk 19 ,dy o{k l
fgeky in" k l cht ,df=r fd; x; rFkk ry
ifr"krk d vkdyu d fy, n ,uth fjlp
bLVh;V ¼Vjh½] ub fnYYkh dk Hkt x;A u"kuY C;jk
vkQ lYkkV tufVd fj lkl ¼,uchihthvkj½] ub
fnYyh }kjk miyC/ djok; x;] ekud ik:l d
vulkj lkj l dyu dk iklikV MkVv vfHkfyf[kr
fd;k x;kA ry RkRok d ifj.kke d lk"pkr mRd"V

, "kkf l,luk d cht l i knik dk mxk;k x;k t l
> 30% ry rRoA fgeky in" k d foHkUu Hkxk l
> 30% ry rRok oky 21 cht lkrk dk vfHkKkr
fd;k x;kA ftle l 9 cht lkrk e ry rRo
> 35% FkA 23 g {k= t l BkdjokMk ¼ukyKx<½]
tkgkjth ¼lkyu½] etgkyh ¼lkyu½] cgeidj
¼fcyklij½] Hkk tuxj ¼lkyu½] leykb ¼lUuh½]
noh/kj ¼lUuh½] /kkjtk ¼lkyu½] ukjx ¼ljekj½]
lkjkgu ¼f l jekj½] ukyKx< ¼lkyu½ e fgeky in" k
d foHkUu lFkkuk ij yxHkx 57]000 ikni jkfir dj
in"ku jki.k lFkkfir fd; x;A ifj;ktuk d vUr e
16 g ij in"ku jki.k dh mUkjthfork FkA bu
in"ku&de&i;kxkRed jki.kk e foHkUu of)
ijkehVj yxkrkj vfHkfyf[kr fd; x;A l kFk gh
foHkUu in"ku jki.kk l cht Hkh ,df=r fd; x;
rFkk cht mit Hkh vfHkfyf[kr dh xBA dN l rfr;k
l cht Vjh] ub fnYyh dk ry vkdyu d fy, Hkt
x;A fukEu rFkk e/; fgeky;u {k=k e tVQk
djd l dk mxku d fy, ik/k"kyk v/;;u fd;
x;A foHkUu cht lkr l cht] cht lkrk dk
IC#No. iku d fy, ,uchihthvkj] ub fnYyh dk
lLrr fd; x;A ifj;ktuk dh foHkUu voLFkvvk d
foHkUu , l kfl , 'kuk dh dye uVod l k>h nkjk dk
miyC/ djokb xBA tVQk djd l e Qyu lfvx
d fy, dkgjk ,d egRoi.k ?kVd g] D;kfd dkgjk
oky {k=k e ifr ikni cgr de cht ink fd;A
fgeky in" k d dN {k=k e lfn;k d ikjEHk e cht
ifjiDork ,d xEHkhj leL;k d : lk e vfHkfyf[kr
dh xBA fukEu rFkk e/; fgeky {k= e tVQk
djd l Åpkb rFkk lFkfr of) rFkk mUkjthfork ij
cgr iHkko Mkyrh gA yUVuk lØfer {k=k e
tVQk dh lFkkiuk ,d dfBu dk; l kfr gvk
gkykfd ifj;ktuk ekPk 2011 nkjku lQyrk iod
ijh dj yh xb g rFkk in"ku jki.k Hkfo"; dh
vulU/kku f0;kdykik rFkk if" k.k mn"; k d fy,
i;kxkRed lkexh d fy, lkr d : lk e dk; djxA
tVQk djd l dk LFky eY;kdu% tVQk
djd l d 10 mRd"V , l kfl , 'kuk dh tMk okyh
dyek dk cgLFkffud i;kxkRed ijh{k.k fgeky
in" k d ftyk fcyklij e lkyx xko e 0-5 g- {k= e



fd;k x;k g $\frac{1}{4}$ N 31°21.356', E 76°49.737' Åpkb: 938 eh½ bl ijh{k.k e okLrfod jki.k vDVcj 2008 e fd;k x;k rFkk dN ,lkfl,'kuk 2009 e ck;vDukykt h foHkx $\frac{1}{4}$ MhchVh½ tVQk u"ku y lelo;d }kjk miyC/k dj; x;] lkfl;dh fMtkbu d vulkj jkfir fd; x;A gkykfd l[k t l gkykr d lk"pkr dkgj dh pkV rFkk Hkkjh ?ku gey l o"k 2009 rFkk 2010 d nkjku tVQk iknik dh mÜkjthfork bl LFky ij vpkud fxj xba vr½ blh idkj d ijh{k.k bUgh ,lkfl,'kuk d lkFk flrEcj 2010 e fgekpy in"e d dkxMk fty e Tokyk th {k= e iu½ LFkkfir fd; x; $\frac{1}{4}$ N 31°52.947', E 76°18.880' Åpkb: 546 eh½A ijh{k.k u 0-5 g- {k= doj fd;k rFkk cgr vPNh ikjFEHkd mÜkjthfork vfHkyf[kr dh xba of) rFkk mÜkjthfork vkdM fu;fer :lk l vfHkyf[kr fd; x;A



BkdjokMk] ukykx< $\frac{1}{4}$ fg-i½ e tVQk d in"ku Hk[k.k.M

v/k&flc ijh{k.k dk LFkkfir dju d fy, 20 ,lkfl,'kuk dk ifrfuf/kRo djr g, tVQk djd l d cht ,u ch ih th vkj] ub fnYyh l fuf/k;u , t l h d fun"kk d vulkj iklr fd;k x;k rFkk o"k 2008&09 d nkjku lLFku dh ik/k"kk yk e chj lykl h ukykx<] ftyk lkyu fgekpy in"e ck; x;A bu chtk dk vdj.k 0;ogkj ik/k"kk yk e vfHkyf[kr fd;k x;A tVQk djd l d mRd"V ,lkfl,'kuk d v/k&flc ijh{k.k dk jki.k vxLr 2009 d nkjku ,d gDV;j {k= e fgekpy in"e d dkxMk fty e Tokyk th xko e fd;k x;k $\frac{1}{4}$ N 31°52.947', E 76°18.880', Åpkb : 546 eh½A dy 523 tVQk ikni tokyk th e jkfir fd; x;A ftle v/k&flc ijh{k.k l mRd"V , "kkfl, lu l ikni rFkk LFkkuh; ,lkfl,'kuk l ikni "kkfey fd; x;A Tokyk th e tVQk i;kxkRed jki.k cgr /;ku l ikf"kr fd; x;A i;kxkRed jki.k rFkk ik/k"kk yk LVkd dk of) rFkk mÜkjthfork vkdM fu;fer :lk vfHkyf[kr fd;k x;A vkt rd mÜkjthfork 50% l vf/kd gA ikni cgr vkt l ijh{k.k e c< jg g rFkk jki.k d nlj o"k e i"i.k Hkh vfHkyf[kr fd;k x;A tVQk u"ku y lelo;d d miyC/k dj; x; fn"kk fun"kk d vulkj Qjoj 2011 e iknik dh NVkb dh xba NVkb d i'pkr ijh{k.k e tkjnkj "kk[ku vfHkyf[kr fd;k x;A tk fd oreku o"k e cht mit dk c<ku e lgk;rk dj l drk gA



v/k&flc ijh{k.k e tVQk ikni dh NVkb