

ENVIRONMENTAL IMPACT ASSESSMENT
ON
THE PROPOSED EXPANSION OF INTEGRATED
IRON & STEEL PLANT TO 1.5 MTPA
IN BILASPUR DISTRICT, CHHATTISGARH
TO
NOVA IRON & STEEL LIMITED

EXECUTIVE SUMMARY (HINDI)

NOVEMBER 2015



M. N. DASTUR & COMPANY (P) LTD
CONSULTING ENGINEERS

ukok vk;ju vkj LVhy fyfeVM (NISL)
 d NRRhIx< d fcykl ij fty e iLrkfor 15 yk[k
 Vu ifr o" ,dhÑr ykg vkj bLir l;= ifj;ktuk
 dk i;koj.kh; iHkko vkdyu (EIA) fjikV



Lkj'k

i;koj.k e=ky;] ou tyok; ifjoru (MoEFCC), d vuekfnr InHk dh 'kr (TOR) d vulkj ljdkj dh Hkkjr d fy, i;koj.kh; iHkko vkdyu (EIA) d fy, fjikV **M.N. Duster & Company (P) Ltd, Kolkata** }kj r;kj fd;k x;k gA ukok vk;ju vkj LVhy fyfeVM (NISL) 15 yk[k Vu ifr o" d fy, NRRhIx< d fcykl ij fty e iLrkfor ,dhÑr ykg vkj bLir l;= ifj;ktukA bl i;koj.kh; iHkko vkdyu (EIA) fjikV d fu"d"kk vkj iLrkfor 'keu mik;k dh ,d lfkIr : ij[kk bl lkj'k e iLrr fd;k x;k gA

ifj;ktuk dh >yd

ferk folrkj d ckn	:15 yk[k Vu ifr o" (1.5 MTPA) dPp bLir
mRikn feJ.k	:5 yk[k 50 gtkj Vu ifr o" (0.55 MTPA) e/;e vuHkkx mRikn
	:5 yk[k Vu ifr o" (0.5 MTPA) rkj NM
	:3 yk[k 90 gtkj Vu ifr o" (0.39 MTPA) gYdk vuHkkx mRikn
ifØ;k elx	:CykLV QuI d ek/;e l xe /kkR dk mRiknu ,o iR;nk vorfjr vk;ju dk mRiknuA bu nkuk inkFk dk folr pki Hkèh (EAF)/buMDlu Hkèh (Induction furnace) }kj rjy bLir dk mRiknu (BF+DR+EAF+IF)
lkv %ifj;ktuk LFky%:NŸkhIx< jkT; d fcykl ij fty d nf{k.k e 40 fd-eh] Dagori xko e fLFkr gA	
ykg v;Ld ókr	: ₹ - fuykeh
ty ókr	:f'koukFk unh d ek/;e l
folr 'kfDr	:dfIVo ikoj lykV
vuekfnr fuo'k	: :-10,834 djKM
lekiu vof/k	:36 months from Go-Ahead date 36 egHu e %'k : dju dh frfFk l½



ifjp;

- 1- NŸkhIx< jkT; lu 2000 e viuh LFkkiuk d ckn l lcl vf/kd vkfFkd fodkl nj d lFk mHjk gA ;g fuo'k d voljk d lFk viuh vk|kfxd cfu;knh <kp] lgt {kerkvk vkj bld ukxfjdk d m|eh;k d fy, vkn'k fodYi inku djrk gA ;g vPNh rjg l lekftd] 'kkjhfd vkj vk|kfxd cfu;knh <kp fodflr fd;k g] vPNh lMd] jy vkj ,;j dufDVfoVh A bLirk m|kx NŸkhIx< dk lcl cMk Hkkjh m|kx e l ,d gA 100 l vf/kd bLirk jkfyx feyk] 90 Lit vk;ju l;=k vkj Qjk feJ /kk] bdkb;k oreku e NŸkhIx< e dke dj jg gA fHkyb d lFk&lFk jk;ij] fcyklij] dkjck vkj jk;x< NŸkhIx< dk ie[k bLirk dUn cu x; gA jkT; dh jkt/kkuh jk;ij vkt Hkkjr e bLirk d fy, lcl cMk cktkj cu x;k gA
- 2- n'k e bLirk d mRiknu d bl ifji{kk e vkj jkT; ljdkj dh igy ,o jkT; e vudy okrkoy.k dk n[kr g, ukok vk;ju LVhy fyfeVM (NISL) ,d 1.5 MTPA LVhy l;= dk Dagori xko] ftyk fcyklij d ektnk ifjlij e dku vkj feJ /kk bLirk d mRiknu d fy, ;ktuk cukb gA NISL d oreku e ,d 500 TPD Lit vk;ju l;= NŸkhIx< d fcyklij fty e Dagori xko e igy l gh dk;jr gA bl ifj;ktuk dk çLrko fo'k'k :i l n'k e cfu;knh <kp d fodkl d fy, ljpukRed bLirk dh c<rh ekx d nf"Vdk.k l çkRlkfgr gA
- 3- NISL d ik l igy l gh 3 MGD ikuh fudklh dh vuefr g vkj vfrfjDr vko';drk d fy, vuefr d fy, vkonu fd;k gA
- 4- NISL d ektnk l;= ifjlij e gh çLrkfor ifj;ktuk dk LFkfr fd;k tk,xkA

ifj;ktuk fooj.k

- 5- lkbV NŸkhIx< d fcyklij fty e fLFkr gA lkbV v{kk'kk 21° 52'40 "& 21° 54'25" N vkj n'kkrij 82° 02'10 "& 82°04'55" E d chp fLFkr g vkj leæ d Lrj ¼MSL½ l 250 ehVj ÅijA ;g yxHkx 34 fdeh nf{k.k if'pe fcyklij 'kgj vkj NŸkhIx< dh jk;ij 'kgj d ioh 70 fdykehVj mŸkj e fLFkr gA
- 6- lkbV jk"Vh; jktekx & 200 l 9 fdeh nj g vkj bld ioh fgLI ij fLFkr gA lkbV ,d ckbikl jkM tk çLrkfor l;= dh mŸkj fn'kk e xko Belha l jk"Vh; jktekx&200 d lFk tMk gvK gA fudVre jyo LV'ku] Dagori xko l 6 fdeh nj l;= d mŸkj&ioh fn'kk e fLFkr gA ,d jyo lkbFMx tk dh oxuk dk ykM&vuykM dj d l;= d fy, dPpk eky igpku dk dke djxk] l;= d fy, [kk l :lk e ifjdfYir gA lkbV jy }jkj fcyklij l 25 fdeh dh njh ij gA fudVre gokb v'ik jk;ij tk



l;= LFky l 70 fdeh dh njh ij gA l;= }kjk e[; :i l ikjknhi ikV tk dh 500 fdeh dh njh ij fLFkr g dk mi;kx fd;k tk,xkA

7- okf"kd mRiknu ;ktuk çLrkfor ifj;ktuk d fy, fuEukul kj fd;k tk,xk

v- mi;kxh chp dk r;kj eky

xe /kkr

% 14 yk[k 60 gtkj Vu

MhEvkjEvkbE

% 6 yk[k 60 gtkj Vu

Tkek gvk ykgk

% 5 yk[k 80 gtkj Vu

dPpk bLlkr

% 15 yk[k Vu $\pm$ 5%

c- fcØh ;kx; bLlkr

% 14 yk[k 40 gtkj Vu $\pm$ 5%

rkj NM

% 5 yk[k Vu

e;/e vuHkx mRikn

% 5 yk[k 50 gtkj Vu

gYdk vuHkx mRikn

% 3 yk[k 90 gtkj Vu

dy

% **14 yk[k 40 gtkj Vu**

8- fu/kkfjr çfØ;k ekx e xe /kkr CykLV Qul }kjk vkj MhEvkjEvkbE MhEvkjE l;= }kjk iLrkfor gA nkuk xe /kkr d :ikrj.k d fy, byfDVd vkd Qul %b,,Q%@bMD'ku Qul dk mi;kx iLrkfor gA

9- dPp eky dh Fkkd [kir ykg d v;Ld vkj p.k dk;yk] fgeikr] puk iRFkj] MkykekbV vkj vUFkIkbV dk;yk dh dN jkf'k gkxhA bu çe[k dPp eky dh vuekfur [kir 7.8 ,eVhiih, d djhc gkxhA vUFkIkbV vkj ihlhvkb dk;yk yxHkx 0.2 yk[k Vu çfro"v,LVfy;k l vk;kr fd;k tk,xk vkj ckdh dPp eky e[; :i l Lon'kh lkrk l miyC/k djkb tk,xhA ,l puk iRFkj] MkykekbV vkj DokVtkbV d :i e lc/k additives, dk vuekfur [kir 0.94 yk[k Vu çfro"v d djhc gkxhA dy feykdi] dPp eky dh [kir nj dPp bLlkr dk yxHkx 5.2 Vu Áfr Vu gkxhA

10- Hkjikb ty dh t:jr djhc 1610 ?ku ehVj/ ?kV/k %;kuh 8.5 ,ethMh% d cjkcj çLrkfor foLrkj ifj;ktuk d fy, gkxhA ikuh dk mi;kx çfØ;k e] BMk ty iokg d Hkjikb ty d :lk e] l;= d LoPNrk vkj vU; fofo/k mi;kx dju d fy, edvi ikuh e gkxhA ikuh d lkr l;= lhek d nf{k.k dh vkj l fufer ,d lou ii gkml d ek;/e l] Sheonath unh gA

11- 295 exkokV fctyh dk mRiknu l;= d vUnj LFkkfir fctyh mRiknu l;= l fd;k tk;xkA l;= dh dy vuekfur fctyh dh vko';drk çfr o"k 128.8 djm fdykokV ?kV/gkxhA 4.5 exkokV fctyh CykLV Qul x l Hkjih Vh-vkj-Vh %Vjokbu% l fd;k tk;xkA bl idkj djhc 299.5 exkokV fctyh dk mRiknu l;= d vUnj gh gkxhA



- 12- 1.5 ,eVhih ,dh—r bLkr I;= d fy, ;ktuk d :i e e[; mRiknu lfo/kk, fuEukfyf[kr ga

Øe I	mRiknu bdkb	bdkb dk ik: i	mRiknu {kerk
1	Dky ok'kjh	1.5 MTPA ¼15 yk[k Vu ifro"kk½	0.4 MTPA ¼4 yk[k Vu ifro"kk½ lQ dk;yk 0.6 MTPA ¼6 yk[k Vu ifro"kk½ lQ dk;yk
2	fIVj lykV	1 x 248 ox ehVj	2.25 MTPA ¼22 yk[k 25 g tkj Vu ifro"kk½ mRikn fIVj
3	CykLV QuI MhEvkjE lykV	1 x 1008 ?ku ehVj + 1 x 550 ?ku ehVj 1 x 500 VhihMh ¼ektnkk½ 3 x 500 VhihMh	1.46 MTPA ¼14 yk[k 60 g tkj Vu ifro"kk½ g,V eVy 0.66 MTPA ¼6 yk[k 60 g tkj Vu ifro"kk½ MhEvkjEevkbE
4	puk@Dolo Calcining I;=	2x 600 VhihMh	0.3 MTPA ¼3 yk[k Vu ifro"kk½ ykbe
5	LVhy fuek.k I;=	b,,Q & 2 x 90 Vu	1.54 MTPA ¼15 yk[k 40 g tkj Vu ifro"kk½ rjy bLkr
		,yE,Q & 1 x 15 Vu 2 x 90 Vu	
		vkbE,Q & 3 x 15 Vu ¼ektnkk½	
		(VD) & 1 x 90 Vu	
		I rr Caster& fcyV d,LVj & 1 x 2 LVUM fcyV Ig Cy e d,LVj 2 x 4 LVUM	1.50 MTPA ¼15 yk[k Vu ifro"kk½ ØM LVhy
6	jkfyx fey	ok;j j,M fey ¼NM ehY½	0.5 MTPA ¼5 yk[k Vu ifro"kk½ rkj NM
		e/;e [kM fey	0.55 MTPA ¼5 yk[k 50 g tkj Vu ifro"kk½ ,puy]che xky vkj pkdk
		gYdk vuHkkx fey	0.39 MTPA ¼3 yk[k 90 g tkj Vu ifro"kk½ ,puy]che xky vkj pkdk

13. I;= dk gjh >Mh feyu dh rkjh[k I 36 egdu dh vof/k d Hkhrj ijk gku dh lHkkouk ga lIkku Iiu Bdnkj d }kjk e[; I;= dk fuek.k dj;k;k tk;xkA



çn" .k de dju d mik;

- 14- dPp inkFk d HkMkjju] dUo;j }kjk inkFkk dk bdkb;k e Hktu d Øe e] inkFkk dh lkbthx e] bR;kfn fudyu oky ?ky d.kk dk dUo;j dk <ddj] ikuh d fNMdko dju vkj ty Qkfx ncko lfr d Áokg l jkd tk,xkA
- 15- puk dh /ky d.kk] CykLV QuI vkj fIVj I;=k d LVkd gkÅI l /ky d.kk dk mi;Dr {kerk oky byDVkLVfVd çlfiVVI %ESPS% @ cx fQYVj bdkb }kjk bdîk dju dk Áko/kku fd;k x;k gA cx fQYVj @CykLV QuI d <ykb LFkku %gkÅI% l fudyu oky ¶;el vkj bLirk xyu'kkyk e fudyu oky ek;/fed ¶;el %QuI e inkFk dk Mkyu vkj bLirk d fudyu dk jkdu d fy, Hkh fd;k tk;xkA
- 16- /ky mRl tu fofHkUu Hkfê;k vkj fdYuk l ngu d dkj.k Hkh gkxkA bu /ky Hkj cdkj xlk dk byDVkLVfVd çlfiVVI %ESPS% dk cx fQYVj }kjk lkQ fd;k tk;xkA pu /ky vkj Mkyk /ky dk lcf/kr Hkêk ¶y e Qfod tkyh }kjk jkd tk,xkA
- 17- dkcu ekukvkdIkBM %lhvk% dk e[; lkr CykLV QuI xI %ch,Qth% g] CykLV QuI xI I;= b/ku d mi;kx d fy, Álr fd;k tk,xkA dkcu ekukvkdIkBM %lhvk% dk Mh-vkj- %I;= % l fudyu oky xI e Hkh etn jgrk gA bl xI dk Mhvkj I;= d fy, vkQVj cfux d{kk (ABC) e vko';d vfrfjä gok dh mifLFkr e lhvk d i.k ngu lfuf'pr djd fd;k tk;xkA mi&mRikn b/ku xI d lHkh ngu çfØ;kvk dk ekbØk çklj vk/kkfjr ngu fu;=.k midj.kk d lkFk miyC/k dj;k tk,xk] ftll dh i.k ngu CO xI dk lfuf'pr gkA fcyklij ftyk] NÙkhIx< e 1-5 ,evhih, {kerk d ,dh—r ykgk ,o bLirk I;= d çLrkfor foLrkj e çHkko vkdyu e lHkh fpefu;k dh Åpkb;k] bLirk I;= mRl tu dh ek=k vkj çn" .k ykMx d vk/kkj ij 30 ehVj l 110 ehVj dh lhek e gkxkA
- 18- lcf/kr I;= d fy, ok; çn" .k de dju d mik; dh lph l{ki e uhp çLrr g %

Ø-I	I;=@vuHkx	çn" .k lkrk	çn" d mRl tu	de dju d mik;
01	dPp eky gMfyx vuHkx (RMHS)	& vkiu HkMkj.k fcLrj vkj lfeJ.k ;kM] dUo;j ifjogu lHkh mRiknu bdkb;k d fy, & cn {k= e ijb @LØhfux ,o cdjk ykMhx	HkxkMk /ky HkxkMk /ky	iku h d fNMdko] doj dUo;j] Q,fx l [kh lHkh LFkkurj.k vd ij l [kh Q,fx vkj cx fQYVj vk/kkfjr /ky vyxko fllVe
02	dky ok'kjh	& vkiu HkMkj.k	HkxkMk /ky	iku h d fNMdko]



		dUo;j ifjogu l Hkh mRiknu bdkb;k d fy, & cn {k= e ijb @LØhfux ,o cdjk ykMhx	HkxkMk /ky	doj dUo;j] Q,fx l [kh l Hkh LFkkukrj.k vd ij l [kh Q,fx vkj cx fQYVj vk/kkfjr /ky vyxko fLLVe
03	fIVj lykV	& dUæh; lykV dedusting {k= &vif'k"V fl y x l	/ky] SO ₂ vkj NOx	byDVkLVfVd }kjk /ky dk vyxko %b, l ih &b, l ih
04	CykLV QuI	& LV,d ?kj & dPpk ?kj	/ky /ky	& cx fQYVj vk/kkfjr /ky vyxko fLLVe &b, l ih
05	çR;{k deh l;= %dk;yk vk/kkfjr½ DR Plant	& CykLV QuI LVko -WHRB d fpeuh l mRl tu d &l;= l /ky dk vyxko	-SO ₂ vkj NOx, /ky	&b, l ih
06	, l,e, l %b,,Q] vkb-,Q-] ,y-,Q] oh Mh½	&çkFkfed mRl tu b,,Q o ,y-,Q &ek/;fed mRl tu b,,Q] vkj ,y-,Q	/ky @ /k, /ky @ /k,	BMk ty moV vkj cx fQYVj cx fQYVj
07	fey Hkëh	& Hkfê;k ghfVx l x l	NOx, /ky	de NOx v,D l h b/ku cuj
08	dylhulu bdkb	Hkëk vif'k"V x l	NOx, /ky	cx fQYVj
09	dfIVHk fo r bdkb	fl;yx l C;k yj Hk l h	-SO ₂ vkj NOx, /ky	&b, l ih

- 19- dk; {k= d Hkhrj fujrj 'kkj de dju d fy,] de 'kkj gkuokyh jkVjh midj.k vkj diu de dju oky vojkd t l mik;k dk l;= d fMtkbu igyvk e 'kkfey gkxkA bld vykok] 'kkj midj.k vyx l j[kk tkuk gkxkA ifjpkyu dju oky ykxk dk /ofu jfgr fu;=.k d{k@dfcu l mu 'kkj ço.k e'khuk dk pyk tk,xkA LVhe ejectors l kbyl j d l kFk miyC/k dj;k tk,xkA 'kkj lkr l 3 ehVj dh njh ij eki tku oky 'kkj {kerk dk rk bu l Hkh 'keu mik;k d l kFk] 85 Mhch ¼,½ d Hkhrj j[ku dk Áko/kku fd;k x;k g] fujrj 8 ?kV dh vof/k d fy,A



- 20- çø;k vif'k"V ty e T;knkrj Bkl vif'k"V gkx doy fey vif'k"V dk NkMdj] ft le
rjrk gvk vfrfjDr ry vkj xht gkxA
- 21- TSS ;Dr ikuh l Li"V ikuh dk Áklr dju d fy, çR;d gku oky lkr d ty dk fy,
clari-flocculation l;= d ek/e l ikfjr fd;k tk,xkA Áklr Li"V ikuh dk çR;{k
BMk @lQkb lfdV d fy, iuuohuhdj.k fd;k tk,xkA
- 22- lcf/kr feyk l Áklr çolg dk vyx l ry flde l] clari -flocculators vkj ncko
fQYVj d ek/e l xtkj dj vLFkk;h ry vkj Vh, l, l dk vyx fd;k tk,xkA

oreku i;koj.k lek;ktu

- 23- i;koj.k çHkko vkdyu %bvk,½ d ç;ktu d v/;;u d fy, {k= dk] nk %2½ tkuk e
lhekdu fd;k x;k g%&
- v% dkj tku] og ;g g fd çLrkfor bdkb;k dk ft l 803-05 ,dM tehu {k= e
LFkkfir fd;k tk,xk %xhuQHhYM lkbV;½ vkj
c% cQj tku] çLrkfor ifj;ktuk LFky dh ifjf/k l yxHkx 10 fdeh dk gokb
dojt %dkj tku vklik l %A i;koj.kh; çHkkok dk fd l h Hkh 10 fdykehVj dh
ifjf/k d {k= d Hkhrj fufgr gkuk ekuk x;k gA
- 24- çLrkfor ifj;ktuk gkliv LVhYl fyfeVM vkj ektnk l;= l lV {k= d ektnk ifj l j
ek LFkkfir fd;k tk,xkA lkbV NÜkhlx< d fcyklij fty e fLFkr gA ifj;ktuk LFky
v{k'k'k 21°52'40" - 21°54'25" N vkj n'kkrj 82°02'10" - 82°04'55" E d chip
fLFkr g tk fcyklij 'kgj l;= LFky d 34 fdeh mÜkj io vkj jk;ij 'kgj d 70 fd-eh-
nf{k.k if'pe e fLFkr g A
- 25- 0-42% l 0-26% dh jt e miyC/k tfod dkcu] ifj;ktuk LFky dh —f" k Hkfe d
vkl&ikl dh feêh e dkcfud dkcu oreku d fupy Lrj dk n'kkrk gA 5-42&6-51 dh
lhek e SAR eku dk ifj.kke l Hkh ueuk LFkkuk e l kfm;e] dfy'k;e vkj eXuhf'k;e
oreku dk b"Vre Lrj dh ryuk e vf/kd dk ldr feyrk gA ukbVktu] QkLQV]
ikv'k;k;e] lYQV] DykjjbM] ykgk vkj rkck eY; ik"kd rRo Lrj bfxr miyC/k d ifj.kkek
d l kFk 1-4&1-5 xke @ l h l h dk ?kuRo] l Hkh LFkkuk ij i;klr l vf/kd g vkj bl rjg
dh feêh e ik/kk dk fodkl cgr vPNk l gku dk vueku gA
- 26- l Hkh lrg /kkjkvk d dy dBkjr 133.33-206.67 feyhxe@fyVj gku dk vueku gA
A fofHku lrg d ikuh d ueu e vklr DO dk Lrj lrg dh l Hkh /kkjkvk e 5-87 l 6-6
feyhxe@fyVj d chip e jgxkAtcdh BOD Lrj 3-0 l 5-0 feyhxe@fyVj d chip e
glxkA dy dkfyQke dk Lrj 330-493.33 MPN/100 ML fofHku lrg ikuh e glxkA



;g ik;k x;k g fd Faecal dkfyQke dk Lrj lkekU; l vf/kd g vkj blfy, ;g eu";
d mi;kx d fy,] fcuk fdVv.k dk gVv; g, mi;Dr ugh gkxkA

27- p;fur LFkkuk d dy dBkjr ,o tehu ty Lrj e Øe'k 265 - 366 feyhxe
@fyVj vkj 618-781 feyhxe@fyVj %Vh-Mh, l % ukik x;k gA tcf d Lohdk; ekud g
dy dBkjr d fy, 200 feyhxe@fyVj vkj VhMh, l d fy, 500 feyhxe@ fyVj
gA Økfe;e] lh l k] vk lfud vkj vU; Hkkjh /kkrvk dk Lrj irk yxku dh lhek l uhp
ik;k x;k gA

28- vklr ,dkxrk %24 ?kV% PM₁₀ vkj PM_{2.5} dh Øe'k 50.7-61.3 feyhxe@?ku ehVj
vkj 23.3-27.2 feyhxe@?ku ehVj dh jt e gA SO₂ vkj NO_x dk Lrj vPNh rjg l
NAAQs }kjk fu/kkfr : i e xkeh.k {k= d fy, vuefr Lrj d Hkhrj gA lhvk vkj
ih,,p dk Lrj g ;k rk irk yxku dh lhek l uhp g %chMh,y% ;k NAA Lrj l cgr
uhp gA

29- okVeku fQYVj iij ij ,d= PM₁₀ d jklk;fud fo'k"krkvk dk vkdyu dju d fy,]
/ky d ueu flfydk] Hkkjh /kkr] ctu ?kyu'khy v'k vkj polyaromatic gkbMdkcu dh
mifLFkr d fy, fo'y" .k fd;k x;kA /ky e e[; :i l ykg vkj flfydk feyk vkj
fd l h Hkh gkfudkj d ?kVd 'kkfey ugh gA

tfod i;koj.k

30- v/;;u {k= e[; :i l ,d Qlyh —f" Hkfe] l kQ Hkfe] ekuo inhabitations] ufn;k]
ugjk vkj rkyck d gA v/;;u d {k= e dkb ekVh ouLifr doj ugh gA iMk vkj
>kfM;k d xhu doj v/;;u d {k= e] ufn;k] ugjk vkj rkyck vkfn dh cd] lMdk d
fduj d l kFk —f" Hkfe dh ifj/k e gA v/;;u {k= e ,d nojkuh&tBkuh efnj d uke
l ,d fojklr efnj gA ft l dk {k=h; l kL—frd egRo g vkj ;g ,d ijrkrRod [knkb
gA gkykfd] çLrkfor ifj;ktuk LFky fc[kj ouLifr doj d l kFk FkkMk ygjnjk ctj Hkfe
gA

31- v/;;u d {k= dh tyok; scrub %iyk'k% vkj ckcy %ccy dRFkk% ouLifr d xBu dk
çHkkr fd;k gA dN LFkkuk e >kfM;k d xBu iyk'k %iyk'k% vkj ckcy %ccy dRFkk%
cgrk;r l fc[kj g, g] t gk dN ctj Hkfe] ctj Hkfe vkj ijrH Hkfe gA

32- v/;;u d {k= e ik;k db vk" /kh; egRoi.k ik/kk lcl vke çtkfr cy %Aegle)
Akanda %enkj% Jamal ghota %tVQk d d l %] Hkkjr; ik/kk %Abutilon dYQk%]
Ishwarmool %Aristolochia Indica%] Satavar %lRkoj% u'kk %u'kk /krjk%] cFkvk
%cFkvk%] rylh %Ocimum sanctum%] Sickie senna %Cassia tora% vkfn ik; x;
gA



- 33- dkb fjto ;k ljjfkr ou] jk"Vh; m|kuk] ou; tho vHk;kj.;] gkFkh@ Vkbxj fjto] çoklh jkLr uflVx & chfMx tku v/;;u {k= e ugh ik; x; g] doy ckjgeklh ty fudk;k Sheonath unh vkj Mniri unh dk NkMdja

ekuo i;koj.k

- 34- tux.kuk d vkdmk d ldr l ipiu ¼55½ xkok ,o ,d ¼1½ uxj ipk;r dh dy tul[;k] 2001 l 2011 rd 10 lky dh vof/k e 56,371 l c<dj 78,023 g] tk n'kdh; tul[;k of) nj dh 38.41 Qhlnh gA

jk"Vh; vklr fyx vuikr ¼v/;;u d {k= e 933 FkA 2001 e bldh vi{kk fyx vuikr] jk"Vh; vklr dh ryuk e T;knk 963 Fkh% 2011 e jk"Vh; vklr 940 vi{kk—r ihvkb, e fyx vuikr 988 l vf/kd jgk gA

- 35- LFkkuh; vkcknh d cger Lokfero okyh?kjk e jgr gA ?kjk e cfu;knh lfo/kkvk d lkFk ;k rk ; ?kj iDdk] v/k iDdk ;k dPpk g] yfdu bue cfu;knh lfo/kkvk gA LFkkuh; ykx oreku fLFkr l voxr Fk vkj fopkj foe'k vkj lo{k.k d nkjku ckrphr d fy, [ky FkA

- 36- ifj;ktuk d çHkko {k= e vktfhodk dk çe[k lkr [krh vkj —f"k Je] depkjh jktxkj xkjVh ;ktuk ¼bth, l½ }kjk bV Hkêk] pkoy feyk] ?kjjy ,jukl] fuek.k {k=k vkfn e vkdfled vkj lfonk Je dkj[kku e dke dju vkj lok] i'k ikyu] exh ikyu] eRL; ikyu] M;jh dju d fy, g vkj upla lcf/kr NkV ieku ij dkjkckj ,l mi;kfxrk LVkj] lkbfdy ejEer dh nduk vkfn d : i e {kæ ndku çfr"Bkuk vkj i'k e bl rjg d : i e Mkbojj Dyhuj vkfn dkjkckjh ik; x; gA

- 37- çkFked v/;;u d vulkj] de vk; ox d ifjokjk e lcf/kr efgykvk dk e[; : i l bth, l d rgr vkdfled etnj d : i e dke djr g ;k vkj vuc/k fuek.k LFkyk ij dk;drk] —f"k {k=] pkoy feyk] bV Hkêk vkj ?kjjy ,jukl d : i eA efgykvk d fy, dkj[kku jktxkj ihvkb, e ugh d cjkj gA çkFked v/;;u ihvkb, e de vk; ox dh efgyk, dmh egur d Mcy f"kvV e dke djr g ¼?kj vkj dke nuk dk ;kuh%A

- 38- ik l e fLFkr e/;e vkj cM ieku ij çe[k m|kxk e exy Lit ,M LVhy çkboV fyfeVM] tk;loky udk bMLVht fyfeVM vkj HkktV;k 'kjk çkboV fyfeVM ¼c,Vfyx lykV½ gA

- 39- ljdkj d çkFked LokLF; dUæ Dagori. Amerikappa vkj Bhandapara t l xkok e gA ihvkb, e vf/kdk'k xkok e vxuokMh dUæk dk mi;kx gkrk gA dk;Øek dk çHkko <x l vkj vPNh rjg ikp lky dh me d cPpk d lkFk dh tk jgh io çlo vkj çlokÜkj LokLF; ij /;ku dfær dj jg gA ljdkjh vLirkyk Sargaon vkj Bilha e fLFkr gA futh fpfdRIk lok; Bilha vkj Chunchniya ij miyC/k gA vkikrdkyhu



lok l[;k 108/102 l ykHk ihvkb, {k= e mBk;k tk ldrk gA xkok dh vkrfjd duk
ij Hkh vkikr fLFkr;k e lckf/kr t:jrk dk fy;k tk ldrk gA

40- ikuh d çe[k lkr ckjoy] Vîcoy@ gMii vkj rkykck dh rjg lrg ty fudkb gA
cgr ihvkb, e futh ckjoy dh l[;k Hkh dkQh gA xeh d ekle d nkju ikuh dh
vkifr vfu;fer g vkj Hkty Lrj de gk tkrh gA ekx ij diuh Dagouri vkj
Majhidera ¼vefjdh vdcjh dk ijok½ Vdj d ek/e l xkok e ikuh miyC/k djkrk
gA lyQk xko e Vdj uxj ipk;r }kjk lpkfyr gA

41- [ky e 'kkp dh çFkk ihvkb, e 0;kid gA ljdkj] futh difu;k vkj lenk; dh igy
vHkh rd bl eí dk lek/kku dju e l[ke ugh gk kb gA ihvkb, e 0;fäxr 'kkpky;k
gku oky ifjokj ukeek= dh gA bld vfrfjä ljdkj }kjk çLrkfor 'kkpky;k dk ;k rk
vHkh rd fuek.k vkjEHk ugh gvk ;k vkj db ekeyk e blh idkj NkM fn;k x;k gA
LFkkuh; vkcnh u çLrkfor fMtkbu vkj ?kfV;k x.koDÜkk lkexh fd if"V dhA dN xkok e
[kkn e bl cnydj mi;kx fd;k tkrk gA vif"V çc/ku; gkykfd ihvkb, e Bkl
vif"V çc/ku d eí ij vHkh rd egRo xg.k ugh fd;k gA

42- cdk dh rjg foÜkh; ILFkkvk Bilh d {k= e e[; :i gA ¼Nipaniya e½ Mkd?kjk vkj
xkeh.k cdk cpr vkj foÜk l lcf/kr vke ILFkku gA __.k d ekey e xkeh.kk dk vki l
e yu&nu gkrk gA dN ykx lkgdkj l __.k Hkh yr gA dN efgyk leg Hkh ihvkb, e
dk; djr gA

43- vxuokMh dUæk l ihvkb, e cgr l xkok e cpiu f'k{k dh lfo/kk feyrh gA xkok d
vf/kdk'k e f'k{k lfo/kkvk çkFked ;k e/; Lrj d fy, gA gkb Ldy dh f'k{k d fy,
Nk=k dk Bilh vkj Sargaon d Ldyk e nkf[kyk yuk iMrk gA d,yt dh f'k{k d
lc/k e] Nk=k dk Amerikappa vkj Bilha d d,ytk e nkf[kyk yuk iMrk gA ¼t l
fpfdRlk ;k vktfodk iBîØe d :i e½ i'koj fMxh iBîØek dk vkx c<ku vkj
vk|kfxd çf'k{k.k d fy, Nk=k dk Bilha tkuk iMrk gA

i;koj.k tkf[ke eY;kdu

44- ifj;@tuk d i;koj.kh; ÁÒko dh Ákjfòd scoping MoEFCC nokjk eY;kdu fd;k
x;k gA rnu[kj] ÆvkÃ, d Inò (TOR) d ekey dh if"V dh xÃ gA bld lkFk &
lkFk] ,lh vkfn AfØ;k Án;@fxdh] lkektfd enn d p;u d :i e vU; Álkfxd ÁÒko
Òh ÆvkÃ, e 'kkfey fd;k x;k gA

45- ÆvkÃ, fu"d"kk v@j i;koj.k ij udkjkRed ÁÒko d de dju d fy, de dju d mik;
uhp l{ki g

I	xfrfof/k	i;koj.k çHkkok	'keu mik;k	yHk
i)	ifj;ktuk LFkkiuk	vk kfxd	&ty ljk.k	&cfu;knh <kp e



		fodkl	&çñ"kk fu;=.k d mik;k & Bkl vif"kkV çc/ku & xhucYV fodkl & lkekftd mRFkku vkfn	l/kkj & jktxkj ltu; & djv vkj 'kydk d :i e ljdkj }kjk jkLo vtU; & jkT; d ,d ith ifjli fUk; & ikl d {k=k d vkfFkd fodkl d fy, 0;kid xtkb'k
ii)	fuek.k	/ky d mRltu fuek.k d le; vLFkbb çfrdy çHkko] fuek.k e vif"kkV ty dk Áokg vkj fuek.k Jfedk dh ljjkk	& edukbTM fuek.k fuek.k vof/k dk de dju d fy, & ikuh d fNMdko l /ky e deh & jkr d le; d nkjku 'kkj gku oky dkek dk jkduk & ljjkk çFkkvk vkj ljjkk midj.kk d mi;kx & rjy vkj Bkl Áokg d mfpr çc/ku	& lrg /kkjk çñ"kk.k dh jkdfkce & dkQh lkQ Workzone i;koj.k
iii)	Sheonath unh l fudklh	vxj ty fudklh e i;klr ljjk.k d mik;k dk viuk;k ugh tk;xk rk bld n"ÁHkko	&mi;kx d ckn vif"kkV ty dk cn yi jh lkbfdyx }kjk ty ljjk.k & fofHkUu xj&mRiknu bdkb;k e vif"kkV ty dk mi;kx & dkjhç 'ku; rjy fuogu e,My dk viukuk & rkykck@ unh d iku h fudklh e o"kk ty lp;u	o"kk ty lp;u vU; cgko ç;käkvk dk çHkfor fd, fcuk U;ure gkxkA
iv)	l;= vif"kkV ty dk Áokg	çfrdy] vxj vuipkfjr vif"kkV ty vkl&ikl d /kkjkvk e Áokfgr gk	& lcf/kr l;= d Hkhrj vif"kkV ty d iupØ.k }kjk ty ljjk.k djuk & CETP }kjk vfre lQkb CT xnk ikuh Áokg] l;= lfuVjh lkQ ty] vkj nlj	& rkykc e ,d= 'kkf/kr vif"kkV ty dk iu% mi;kx & lrg /kkjk dh x.koUkk dkQh çHkfor ugh gkxh D;kfd lrg /kkjk e dN Áokg ugh



			vif"V & lhbVh ih }kjk ifjf"V ty dk vU; de mi;kfxd [kir d fy, xkM rkykc e tek fd;k tk,xk tl 'keu xhucYV@ifj-'; j[kj[kko] Lyx dk BMk dju d fy,A & lhbVh ih }kjk ifjf"V ty dk vkx vYV fuLinu ¼; ,Q½ e lkQ fd;k tk,xk @ fjoI v,Lekfll ¼vkjvk½ e lkQ fd;k tk;xk vkj bl l;= e ty dh ifr dh tk;xh & djhc 'ku; rjy fuogu e,My dk viuk;k tk;xkA	gkxkA
v)	Okk; An"K.k mRiknu l Áfd;kvk	xeh d dkj.k] /ky] SO ₂] NO _x] CO vkj VOC d mRl tu l çfrdy ÁHkko	& HkxkMk /ky d neu d fy, ikuh d fNMdko vkj l[kh Q,fxx & cx fQYVj vk/kkfjr orkone HkxkMk /ky fudklh midj.kk & vif"V xl dh lQkb d fy, b,l ih filVe & gokb çn"K.k dh cgrj Qyko d fy, Ápk fpeuh &Lk[k dPp eky dk <ddj HkMkj.k vkj Á.kkfy;k d fy, bl dk Hk tu e	& de çnf"kr ifjo'kh ok; j[ku d fy, vkj ifjo'kh ok; x.koUkk d ekudk dk cuk, j[ku d fy, & lenk; d LFkkfud jkxk dh jkdFkke
vi)	'kkj dk;{k= e	dkj.k jkVjh / okbcVj e'khu / midj.k] Hkki btD'ku vkfn l 'kkj	& de 'kkj gku okyh jkVjh midj.k dk p;u] diu e deh yku dk mik; vkj ?k.ku Hkxk d xfr	lpyu vkj j[kj[kko dfe;k dk 8 ?kV dh fujrj vof/k e 'kkj tkf[ke vf/kd l



		dk n"ÁHkko	dk lrfyr djuk & ,d vyx txg e 'kkj gku oky midj.kk dh gkmflx & 'kkj <ky dfcuk / pulpits l v,ij'ku &Á'kk lfud fu;=.k	vf/kd 85 Mhch ¼,½ l T;knk ugh gkxkA
vii)	Bkl dpj dk fudyuk	çfrdy] vxj ,d l kFk lkyk d fy, [ky {k= e HkMkj mRiUu Bkl dpj dk fd;k tk;A	& Bkl dpj dk l;= d Hkhrj iu: mi;kx l ;k cp dj ;k vU; ykHkdkjh ç;kx l vf/kdre l k/; çILDj.k djuk & yhfpx d dkj.k Hkfexr ty d çn"K.k l cpu d fy,] HkMkj.k ;kM e mi;ä ykbuj dk Áko/kku	& Bkl dpj d Mfix d fy, U;ure Hkfe {k= dk Cy,d djuk & Hk&ty çn"K.k dk jkdu d fy, okf.kfT;d@mi;kxh ç;ktu d fy, Bkl dpj dk vf/kdre iuH mi;kx
viii)	LokLF;	dke dj jg dfe;k vkj lenk; d yxkx dh 0;kol kf;d LokLF; ij çfrdy ÁHkko	& v,u ykbuj mRltu vkj vif'k"V ty fjgkb vkj l/kkjRed dkjokb dh fuxjukh çn"K.k Lrj dh fMtkbu y{; l vf/kd ugh gku d fy, & l;= dfe;k dh 0;kol kf;d LokLF; n[kHkky vrjjk"Vh; vH;k l d vulkj	& 0;kol kf;d chekfj;k@[krjk ij jdkFkke & mRiknu Je fnol d udlku ij jdkFkke
ix)	Ij{kk	Ij{kk [kkfe;k d dkj.k çfrdy ÁHkko	Lk;= d lpyu vkj j[kj[kko e fofL=r Ij{kk mik;] fotyh midj.kk] vfXu Ij{kk mik; ,o vfXu@/k, d irk yxku@ vykeA ikVcy lhvk fMVDVjk ,o dfe;k d fy, Ij{kk midj.kk	& ekeyh ;k ?kkrd pkV d dkj.k n?kVukvk l cpko l;= dfe;k d fy, & xl fj lko] vxj pkV vkfn dh rjg [krjukd ?kVukvk l cpko
x)	Peripheral lkeft d&vFko; oLFkk	ykhkdkjh	& fuxfer lkeft d nkf;Ro ¼ lh,lvkj½ d ,d Hkx d :i e]	& ifj;ktuk dh Loh—fr LFkkuh; vkcknh d ek/;e l



			f'k{kk} cfu;knh <kpkj LokLF; d fodkl d fy, LFkkuh; ykxk d lkFk fopkj&foe'k djd lkekftd mRFkku d dk;Øek dk djuk tl ikuh dh vkifr vkj Hkkfrd okrkoy.k	tokng o ikjn'kh mik;k d lkFk & lkekftd ftEenkjh dk dkjkckj dk ,d vfHkUu fgLlk cuku d fl)kr e fo'okl djd ifj;ktuk dh LFkkiuk & LFkkuh; ykxk d fy, lkekftd mRFkku vkj jktxkj d volj
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- 46- ÁLrkfor i;koj.k 'keu mik; d dk;kuo;u d fy, vuekfu ithr o;; (CAPEX)
520 dj@M :i; d vklkl g@xk A bl dy vuekfu ithr o;; e l 300 dj@M
Án"K.k de dju d mik; v@j lryu d foUu :i@ dh fn'kk e [kp fd;k tk,xk A 220
dj@M :lk; dk xhucYV fodkl] i;koj.k cgkyh vku ykbu fuxjkuh v@j i;koj.k
Á;x'kkyk v@j Átk ljdj.k d fy, 0;; fd;k tk;xkA
- 47- ;g çLrkfor ifj;ktuk fMtkbu vkj bthfu;fjx d 0;ogkj e vku oky ekud dkm d
fl}krk d vk/kkj ij LFkfkir fd;k tk,xk] lkFk gh lkFk lk; l;{kk mik;k vkj i;koj.k
l;{kk mik;k dk Hkh leko'k ifj;ktuk dk vfHkUu vx gkxkA
- 48- l;= vkj bdkb;k dh LFkkiuk e lcl vPNk bthfu;fjx Áko/kkuk d ckotn vkdfLed
?kVukvk dh lHkkouk l budkj ugh fd;k tk ldrk g tk dh fMtkbu dh deh ;k vufpr
lpkyu vkj j[kj[kko ;k LFkfkir fofHkUu fu;=.k ç.kkyh d [kjc dke dju d dkj.k gk
ldrk gA ;g thou] lifÜk vkj i;koj.k dk çHkkfor dj ldrk gA
- 49- ifj;ktuk d io bthfu;fjx pj.k e bu lHkh lHkkfor [krjk dh igpku dh tk;xhA dN
lHkkfor [krjk dk dkj.k çogk mipkj l;=k dh foQyrk] b/ku xlk HkMkj.k vkj gMfyx
flLVe] çn"K.k fu;=.k ç.kkyh] fctyh d 'k,V lfdV] vljfkkr HkMkj.k vkj ry d dpj
fudkyr le; e ink gk ldrk gA
- 50- fMtkbu Ýht ¼iDdk½ dju d ckn ;k deh'ku d igy ;g l;= bthfu;fjx vkj vkij'ku
euvy e vx l;{kk mik;k yu d fy,] fo'k" :i l b/ku xlk vkj ngu'khy mRiknk l
fuiVu d fy,] ifj.kkek d lkFk HAZOP v/;;u dju d fy, çLrkfor gA
- 51- fuek.k vkj lpkyu d nkju l;{kk vR;r egRo dk gkxkA l;= fofHkUu vkikr lFkfr l
fuiVu d fy, viu Lo; d lkbV ij vkj v,Q lkbV çc/ku ;ktuk LFkfkir djxkA bl d
vykok] vkink çc/ku ;ktuk ¼DMP½ d fofHkUu igyv vkj fopkj&foe'k fd;k x;k g vkj
DMP fjikV l;= d dfe;k dk fouk'kdckjh ?kVukvk l fuiVu e enn djxhA



i;koj.k çc/ku ;ktuk

- 52- lkekftd çfrc) rkvk l fgr l ;= d lex i;koj.k d çn'ku d çHkko çc/ku d Øe e] ;g vko'; d g fd l ;= e , d 0;kid i;koj.k çc/ku ;ktuk ¼b,eih½ gkA
- 53- bl ;ktuk e mfpr lxBukRed <kpk] ;ktuk;] ctV if'k{k.k vkfn 'kkfey gA l ;= d lpkyu i;koj.k fu;ek] l kotfud n;rk dk vuikyu dju] ljdkjh lpuk, le;≤ ij d vulkj gkxkA
- 54- mfpr lxBukRed <kp d fcuk b,eih dk ykx ugh fd;k tk ldrkA blfy, 'keu mik;k d dk;kuo;u vkj l ;= d lex çn'ku ij fujrj l/kkj d fy, mfpr lxBukRed <kp dh ÁLrkouk gA bld rhu dk;kRed vx gkx] okrkoj.k] LokLF; vkj l j{kk fuek.k] tk l k;koj.k dh l j{kk vkj l ;= dk ÁHkko <x l pyku d fy, fd;k tk;xkA l ;= e i;koj.k] LokLF; vkj l j{kk ¼EHS½ d {k=k e vuHkko i'kojk }kjk lpkfyr fd;k tk,xkA
- 55- EHS nkf;Ro fuokgu e fuxjkuh] fofu;ked vuikyu] mipkjkRed mik;k ;ktuk] ctV] dk;kuo;u vkj 0;kol kf;d LokLF; n[kHkky vkj l j{kk dk; gkrk gA Øe'k: vkb,lvk 14001-2004] ,l,&8000-2008 vkj vk,p,l,,l 18001-2007 }kjk vi f{kr d : i e lxBu e x.koUkk çc/ku ç.kkyh d vykok] 0;kid i;koj.k çc/ku] lkekftd ftEenkjh çc/ku ç.kkyh vkj l ;= dk 0;kol kf;d LokLF; n[kHkky ç.kkyh dk viuku dh vko';drk gA vkb,lvk 9002 d vulkj x.kork Á.kkyh d Áko/kku d vykoA
- 56- Åij mYy[k [krjk l vkink dk jkdu d fy,] dN çkFkfed vkink çc/ku mik; fuEufyf[kr gA
- o lHkh l ;= e'khujh d fMt kbu] fuek.k] lpkyu vkj j[kj[kko@lkfof/kd çkf/kdj.k }kjk fu/kkfjr : i e ykx jk"Vh; vkj vrjjk"Vh; ekudk d vulkj djuk
 - o tkf[ke vkj ifj.kke e,Mfyx l vueku yxkdj l ;= dk yvkmV lHkh ykHkk d vk/kkj ij djuk vkj dkb [krjukd ?kVuk@vkink d ekey e dfe;k d fy, bdÎk gku dh txg vkj l jf{kr igp jkLrk çnku djuk A
 - o mfpr vkikr ¼lkbV ij vkj v,Q lkbV nukkk r;kfj;k ;ktuk] bejt l h fjLk l Vhe] vkikrdkyhu lpkj] vkikrdkyhu ftEenfj;k] vkikrdkyhu lfo/kkvk] vkj vkikr dk;k dk fodflr fd;k tk,xkA
 - o mfpr vyke ç.kkyh vkj fouk'kdkih fLFfr d nkjku mfpr çfrfØ;k d fy, dfe;k dk çf'k{k.kA
 - o fu;ked 'krk d vulkj ij l ;= d fy, ijk vfXu l j{kk dojtA



- o vkikr fLFkr d lHkh igyv d fy, bu ifjLFkr;k dk Ác/ku djxk] tk i;klr : i l ç'kf{kr dfe;k d lKfk fuek.k vkj vkink çc/ku ly cuk;k tk;xkA
- o vkink jkdFkke d fy, vkj bll yMu dh {kerk LFkfr dju d fy, /ku dk çko/kkuA ;g l>ko g dh vkink çc/ku d fy, ,d mfpr ;ktuk fMtkbu pj.k e gh ,d foLrkj fjikV& (DMP) r;kj dj fy;k tk;A gkykfd] bl ;ktuk d ljjf{kr vkj d'ky lpyu d fy, vko';d g fd ble ckn e mfpr l/kkj fd;k tk;] l;= d ljjf{kr vkj d'ky lpyu d fy,A
- 57- fpeuh vkj Áokg fuogu d lKfk yx g, vku ykbu fuxjkuh midj.kk d }kjk Án" .k vkdyu d vyko] l;= {k= d Hkhrj pkj vyx vyx LFkkuk ij ifjo'kh ok; x.koÜkk %AAQ% dh lrr fuxjkuh tkp djuk çLrkfor gA ftu Án"dk dh tkp dh tk;xh mle PM10, PM2.5, SO2] NOx, CO vkj O₃ 'kkfey gkxk tk dh MOEFCC d vf/lpuk l[;k thE, lEvkjE 826 %b% fnukd 16.11.2009 d vulkj g] vku ykbu fpeuh fuxjkuh midj.k] lrr , ,ou; LV'ku vkj lrr Áokg fo'y" .k llij dæh; fuxjkuh ç.kkyh l tM jgxA
- 58- NISL yxk d lkekftd mRFkku] mud LokLF; vkj f'k{kk dh lfo/kk] dk'ky fodkl] çnku djd LFkkuk; yxk dh lkekftd&vkfkd fLFkr d mRFkku d fy, fofHkuu igy 'k : djxkA bl lkekftd mRFkku d fy, djhc 271 djkm #i, %nk lk bdgÜkj djkm ek= % dk Áko/kku bl foLrkj ;ktuk e fd;k x;k g tk fd dy ifj;ktuk ykxr dk 2.5% g t lk dh TOR e funf'kr gA

ifjpyu LVt ij i;koj.kh; çHkko oä0;

i;koj.k fo'k"krkvk	vk/kkjHkr ij çHkko	
	'keu mik;k d fcuk ifj;ktuk	'keu mik;k vkj b,eih d lKfk ifj;ktuk
1- Hkfrd&jk lk;fud		
feêh doj	-1	0
Hkfe mi;kx %Bkl vif'k"V HkMkj.k%	-1	0
Sheonath unh ty l lk/ku	-1	0
vif'k"V ikuh çklr 'kjhj e ikuh dh x.koÜkk	-3	0
Hk&ty l lk/ku	0	+1
Hk ty x.koÜkk	0	0
ifjo'kh ok; x.koÜkk	-2	0
Workzone gok dh x.koÜkk	-2	0
Workzone 'kkj	-1	0

ukok vk;ju vkj LVhy fyfeVM (NISL)

d NRRhIx< d fcyklij fty e iLrkfor 15 yk[k

Vu ifr o"k ,dhÑr ykg vkj bLkr l;= ifj;ktuk

dk i;koj.kh; iHkko vkdyu (EIA) fjikV



ifjo'k 'kkj		
II- tfod		
LFkyh; ikfjLFkfrdh	0	+1*
tyh; ikfjLFkfrdh	0	0
III- ekuo		
bUÝkLVDpj	0	+2
vLFkkb jktxkj ltu	+1	+3
LFkkuh; ykxk d vkfFkd mRFkku	+1	+3
lkeftd mRFkku vkj f'k{kk	+1	+3
LokLF;	0	+2
lj{kk	0	+2
IV- lkn;'kk l		
tyok;	0	0
yMLdi	-1	0
xhu dojt	+1	+2*
* xhucYV fodk l gku d dkj.k {k= d 33% rd d fy, Hkfe vf/kxg.k fd;k tkuk gA Legend: '1'= Marginal; '2'= Moderate; '3'=Significant; '4'=Irresversible (+ve)= Beneficial;)-ve)=Adverse		