

eR`©tZ cwi tek eUe `e` Drcv`b: GKwJ we tkvYagr©tZ `b gvingyv teMg¹

mvi mstȳc

cŃi DrKI© RvMvZK mȳ tŃiMi Rb` bMi cŃibqZB Dbze nt`Q |
cvkvcwk bMwiK mȳav cŃi Avkvq bMti RbmsL`v ewx `Z ntZ `ZZI
nt`Q | G cwi tŃiZ bMi tK cwi "QobvLv I Awak RbMvxi emevm DcthvMx
cwi tek mŃiZ mȳ eR`©e`rcbv AZ`sĭ cŃvRbxq GKwJ cŃi cwi YZ
ntqQ | mgtqi `we tZ ZvB eR`©e`rcbv wefvM tK bZb Awz tK tXij mvrvtbv
nt`Q | cwi tek wechqKvix eR`© msiȳYi mŃ_ Zvi Ńviv cŃvRbxq `e` ev
Drm mŃiZ `ȳZvi cwi Pq ivL tQ eR`©e`rcbv | eZŃtb evsj t`tki Awak
RbMvxi, ebvAj `ŃZv, wefvbceŃvZK Aetq cwi tek fvimv` nŃm cwi tY
eR`©e`rcbvMZ wefvbceŃv Awak mdj Zv cŃt`Q | hvi gŃS Ab`Zg nt`Q
evtqM`m, `Re mvi | gvŃvZwi³ etR`©Drcv`b eU tŃnZzm`e bq tŃnZz
G tK m`ut` ifcvĭ Kti Zvi gvŃv nŃmi cvkvcwk A_ŃmZ tZl figKv ivLte |

figKv

we tkĭ RbmsL`v tetob P tĭ tQ hv eZŃtb 600 tKwJ AwZug Kti tQ | RbmsL`v
ewx | mŃ_ mŃ_ A tUKmB Drcv`b I tŃiMi `iaĭ cŃ_exi Rxb msevnx (aviY)
e`vq Awak Pvc co tQ | G Awak RbmsL`v th mKj mŃv i D tEviY NUv`Q Zv
nt`Q: m`ut` i Dci Pvc mŃ; emZevox I Avev`x Rigi Dci Pvc ewx, Lv` ,
Rvj vbx, cwi enbmn Ab`vb` tŃvMxq `e`w i cŃvRbxqZv ewx | Gi dtj gvi vZK
wechqĭ D`© NU tQ Zv cwi tekK Aeȳq Gi gvŃv ewx NU tQ | hvi D`vniY
nt`Q bMievmx mŃ eR`©I Zvi Ae`e`rcbv | mŃWK I wivc` eR`©e`e`rcbv
cwi tek Aeȳq NUv`bvi cvkvcwk bMwiK `v`i jvZ Ki tQ | mŃcŃK GK
mŃvȳq t` Lv hvq, 2025 mvj bMv` cŃ_exi 60 fvM RbMvxi bMti evm Ki te
Avi ZLb bMi tŃi etR`© e`e`rcbvij wKifc nte Zv KíbvZxZ | fvel`r G
cwi vZ DĒiȳi jȳ eZŃtb k³ I `ȳfite eR`©e`e`rcbv tK cwi Pwĭ Z
Ki tZ nte | Gcwi tŃiZ t` Lv hvK eR`©K, Gi cŃit` Ges meŃi Gi
t` tK cwi t` vabceŃv Drcv`b |

¹ mŃbqi cŃiK, ivRbmZ I cŃmb wefvM, MY wekte`vj q, mŃv i, XvKv |

eR©l eR© aiY

c₁ exi c₂ K Rxe w₁ kI Z: gvbe₁ n ev gvbe e₁ envh₁ c₁ K₁ I K₁ g e₁ n₁ tZ K₁ w₁ b, Zij I evqexq w₁ zB Ae₁ ri eR©c₁ v₁ c₁ K₁ z₁ z w₁ b₁ nq| Gi gr₁ S K₁ w₁ b eR©₁ q `e₁ t₁ jv ew₁ ev c₁ K₁ w₁ z₁ z c₁ w₁ b₁ t₁ z m₁ n₁ tR `e₁ r₁ f₁ z nq br; c₁ K₁ w₁ z₁ z Dc₁ r₁ t₁ q w₁ e₁ k₁ o₁ nq br; eis A₁ w₁ a₁ k₁ c₁ w₁ i₁ gr₁ Y Rgv n₁ t₁ q Ggb c₁ w₁ i₁ w₁ z₁ i D₁ m₁ e₁ N₁ u₁ v₁ q hv c₁ w₁ i₁ t₁ e₁ k₁ `i₁ Y₁ i₁ f₁ c₁ t₁ b₁ q| G K₁ w₁ b eR©₁ q c₁ v₁ e₁ t₁ j₁ v₁ B R₁ A₁ v₁ j / A₁ v₁ e₁ R₁ ev solied waste| gvbe w₁ q₁ v₁ i₁ a₁ G m₁ k₁ j eR©₁ D₁ r₁ c₁ w₁ z₁ nq|

evs₁ j₁ v₁ t₁ k₁ c₁ w₁ i₁ t₁ e₁ k₁ m₁ s₁ i₁ y₁ Y Av₁ B₁ b 1995 (1995 m₁ v₁ t₁ j₁ i 1bs Av₁ B₁ b hv evs₁ j₁ v₁ t₁ k₁ i t₁ m₁ t₁ R₁ t₁ U₁ i A₁ w₁ z₁ w₁ i₁ ³ m₁ s₁ L₁ v₁ q 16/2/1995Bs Z₁ w₁ i₁ t₁ L c₁ K₁ w₁ z₁ z Ges Av₁ B₁ b 12/2000 Ges 9/2002 Ø₁ v₁ i₁ v₁ m₁ s₁ t₁ k₁ w₁ a₁ z)-t₁ z e₁ R₁ t₁ K G₁ f₁ r₁ t₁ e₁ m₁ s₁ A₁ w₁ q₁ z K₁ i₁ v₁ n₁ t₁ q₁ t₁: Ø₁ e₁ R₁ c₁ A₁ c₁ h₁ t₁ K₁ v₁ b Zij , evqexq, K₁ w₁ b, t₁ z₁ R₁ w₁ t₁ c₁ v₁ c₁ h₁ v₁ n₁ v₁ b₁ M₁ z, w₁ b₁ w₁ y₁ B ev `c₁ x₁ K₁ z. n₁ B₁ q₁ c₁ w₁ i₁ t₁ e₁ t₁ k₁ i y₁ w₁ z₁ k₁ i c₁ w₁ i₁ e₁ z₁ m₁ v₁ a₁ b K₁ t₁ i₁ Ø (c₁ w₁ i₁ t₁ e₁ k₁ A₁ w₁ `B₁ i I w₁ e₁ B₁ G₁ g₁ i₁ c₁ 2002: 5)| Ø₁ e₁ R₁ c₁ ev waste n₁ t₁ j₁ v₁ t₁ m₁ m₁ e₁ g₁ w₁ i₁ K ev D₁ r₁ c₁ v₁ t₁ k₁ i K₁ v₁ t₁ Ø t₁ h₁ t₁ j₁ v₁ i c₁ K₁ v₁ R₁ b c₁ w₁ i₁ t₁ q₁ t₁ Ges A₁ c₁ K₁ v₁ R₁ b₁ q i₁ n₁ m₁ v₁ t₁ e₁ v₁ t₁ q₁ v₁ n₁ t₁ q₁ t₁ Ø₁ (A₁ v₁ j₁ g 2008)| e₁ m₁ o₁ i₁ A₁ v₁ e₁ R₁ t₁ t₁ K₁ w₁ k₁ i₁ K₁ v₁ i₁ L₁ v₁ b₁ v₁ i D₁ c₁ R₁ v₁ z `e₁ c₁ h₁ s₁ b₁ v₁ b₁ v₁ a₁ i₁ t₁ Y₁ i eR©₁ n₁ t₁ z c₁ v₁ t₁ |

D₁ c₁ t₁ i₁ v₁ ³ m₁ s₁ A₁ v₁ i A₁ v₁ t₁ j₁ v₁ t₁ K₁ e₁ j₁ v₁ h₁ v₁ q, e₁ R₁ c₁ n₁ t₁ Q Ggb `e₁ ev e₁ hv₁ K₁ w₁ b, Zij ev evqexq t₁ h₁ t₁ K₁ v₁ b A₁ v₁ K₁ v₁ t₁ i₁ n₁ t₁ z c₁ v₁ t₁ i Ges G₁ t₁ j₁ v₁ c₁ w₁ i₁ t₁ e₁ k₁ i I gvbe₁ R₁ w₁ z₁ i e₁ v₁ c₁ K₁ i₁ w₁ z₁ K₁ t₁ i | c₁ K₁ z e₁ Ø₁ i c₁ w₁ i₁ t₁ z K₁ g₁ c₁ t₁ y₁ 52 j₁ v₁ L₁ gv₁ b₁ y, h₁ v₁ i g₁ t₁ a₁ 40 j₁ v₁ L₁ w₁ k₁ y₁ K₁ w₁ b I Zij c₁ q: e₁ R₁ c₁ A₁ c₁ m₁ v₁ i₁ t₁ Y₁ i A₁ c₁ h₁ Ø₁ z₁ v₁ i₁ a₁ m₁ o₁ t₁ i₁ v₁ t₁ M₁ g₁ z₁ z₁ e₁ i₁ Y₁ K₁ i₁ t₁ Ø | `i₁ Y₁ i D₁ c₁ i w₁ f₁ v₁ E₁ K₁ t₁ i e₁ R₁ c₁ w₁ z₁ b c₁ K₁ v₁ t₁ i₁ n₁ q: K₁ w₁ b e₁ R₁ c₁ (solid waste), Zij e₁ R₁ c₁ l M₁ i₁ v₁ m₁ x₁ q e₁ R₁ c₁ G₁ t₁ j₁ v₁ i c₁ K₁ z₁ t₁ K₁ i A₁ v₁ e₁ i w₁ e₁ f₁ b₁ o₁ e₁ k₁ g t₁ d₁ i A₁ v₁ t₁ Ø | D₁ r₁ t₁ m₁ i D₁ c₁ i w₁ f₁ v₁ E₁ K₁ t₁ i K₁ w₁ b e₁ R₁ c₁ t₁ j₁ v₁ t₁ K₁ w₁ e₁ f₁ b₁ o₁ e₁ w₁ e₁ f₁ ³ K₁ i₁ v₁ h₁ v₁ q| G₁ t₁ j₁ v₁ n₁ t₁ Q M₁ p₁ t₁ j₁ x e₁ R₁ c₁ K₁ w₁ l. R₁ v₁ z e₁ R₁ c₁ R₁ g₁ v₁ K₁ z. w₁ b₁ g₁ v₁ m₁ v₁ g₁ M₁ Ø e₁ R₁ c₁ w₁ e₁ y₁ t₁ o₁ k₁ b e₁ R₁ c₁ K₁ v₁ i₁ L₁ v₁ b₁ v₁ e₁ R₁ c₁ w₁ b₁ D₁ u₁ k₁ e₁ v₁ i e₁ R₁ c₁ c₁ v₁ g₁ v₁ w₁ e₁ k₁ e₁ R₁ c₁ w₁ P₁ w₁ K₁ r₁ m₁ v₁ s₁ e₁ R₁ c₁ c₁ q: w₁ b₁ w₁ k₁ b e₁ e₁ ri A₁ v₁ e₁ R₁ t₁ Ø, L₁ b₁ L₁ b₁ i i₁ v₁ i₁ v₁ N₁ U, N₁ i₁ e₁ w₁ t₁ z e₁ e₁ ü₁ z L₁ w₁ Y₁ c₁ v₁ c₁ i₁ v₁ i₁ R₁ A₁ v₁ j, e₁ v₁ r₁ v₁ i m₁ s₁ p₁ v₁ s₁ i A₁ v₁ e₁ R₁ t₁ Ø, A₁ v₁ i₁ e₁ t₁ j₁ i L₁ o- t₁ m₁ e₁ i, B- e₁ R₁ c₁ h₁ v₁ b₁ e₁ v₁ n₁ t₁ b₁ i R₁ g₁ v₁ K₁ z. e₁ R₁ c₁ Ø

c₁ K₁ z₁ w₁ n₁ k₁ R₁ x₁ e₁ t₁ b₁ M₁ t₁ n₁ e₁ e₁ ü₁ z t₁ f₁ v₁ i₁ w₁ e₁ j₁ v₁ m₁ z₁ v₁ i₁ `e₁ n₁ t₁ z t₁ h₁ m₁ e₁ i₁ R₁ t₁ Ø Ask c₁ v₁ l₁ q₁ v₁ h₁ v₁ q₁ z₁ v₁ b₁ M₁ p₁ t₁ j₁ x₁ q e₁ R₁ c₁ A₁ w₁ a₁ k₁ D₁ r₁ c₁ v₁ b₁ i `z₁ d₁ j₁ b₁ c₁ v₁ l₁ q₁ v₁ i₁ R₁ b₁ w₁ e₁ a₁ i₁ v₁ m₁ v₁ q₁ u₁ b₁ k₁ m₁ v₁ i e₁ e₁ ü₁ z n₁ t₁ Q K₁ w₁ l. K₁ v₁ t₁ h₁ Ø w₁ K₁ w₁ b e₁ t₁ R₁ c₁ Ø D₁ r₁ m₁ | G₁ Ø₁ v₁ o₁ v₁ w₁ e₁ k₁ | K₁ w₁ l. e₁ e₁ ri `e₁ A₁ w₁ b₁ k₁ c₁ x₁ i₁ z₁ i A₁ b₁ j₁ i₁ t₁ Y₁ i c₁ K₁ z₁ c₁ w₁ i₁ g₁ v₁ i₁ v₁ A₁ v₁ c₁ v₁ k₁ k₁ `e₁ I m₁ v₁ i c₁ K₁ z₁ e₁ Ø₁ i e₁ n₁ v₁ i n₁ t₁ Q | G₁ K₁ z₁ t₁ t₁ L₁ v₁ h₁ v₁ q, 1981-82 m₁ v₁ t₁ j 5,57729 Ub w₁ e₁ f₁ b₁ o₁ e₁ k₁ i m₁ v₁ i

e'eüZ ntq̄tQ Kul. RnḡtZ hvi cwi gvY w̄ tbi mt̄_ mgvb Zvt̄j ep̄ cv̄t̄"Q|

t̄ t̄ki tgm̄vkn̄i t̄j vt̄Z c̄ÖB m̄=üw̄r Z Db̄q̄e I Mvbḡj-K Kv̄h̄ej x bM̄ixi eR̄©
fv̄Üv̄it̄K e'v̄cKZv w̄ t̄"Q| D'vniY w̄nt̄m̄te XvKv I qvmv I PÆM̄Ö v̄m̄U
K̄ic̄f̄i k̄t̄bi K_v ejv hvq| Ḡt̄ i c̄ÖK̄B bZ̄b jvBb `vb, iv̄īi Kv̄t̄R e'env̄h̄©
w̄bḡv̄ m̄vḡM̄Öv̄ t̄q Rgv̄KiY gvbe `v̄r̄ I cwi t̄ek̄t̄K Ae'ÿq K̄it̄Q| S̄yK̄cȲGes
S̄yK̄cȲ©q Df̄q w̄k̄i v̄qb Dr̄cb̄eR̄©Ḡt̄ i Dr̄m̄m̄ḡr| ev̄sj vt̄ t̄ki w̄ef̄b̄ōĀt̄j
t̄Öv̄-eo w̄ḡj t̄q c̄Ö 7000U w̄k̄i c̄Öövb Av̄t̄Q| G c̄Öövb m̄vaviY Z Kv̄R̄vḡj
Av̄bv, c̄ÖZK̄Z.cȲ mieiv̄n m̄v̄av, c̄Öt̄ cwī®vi c̄w̄bi c̄Öv̄R̄bx̄qZv c̄ÖZ.
Kvīt̄Y b`xi Z̄xt̄i c̄ÖöZ| hvi w̄ec̄j m̄sL`K ev̄ cwi gvY Kw̄b eR̄©c̄ÖḠZ: b`x
Ges b`x ew̄nZ nt̄q c̄k̄z̄ I b̄vj vq c̄w̄ZZ nq| G c̄Öövbmḡt̄ni Aw̄Kv̄st̄ki B
eR̄©c̄w̄i t̄kv̄ab e'e`v̄ b̄vB ev̄_vK̄t̄j I Zv Āt̄K̄t̄Rv Ges Ach̄f̄|

G Kw̄b eR̄©Q̄ov̄l Kvi Lv̄bv w̄bM̄Z̄ w̄KQ̄yM̄v̄m̄xq e`ev̄ c`v_©w̄i t̄ek, gvbe `v̄r̄
Df̄q̄t̄ÿ̄I ùḡw̄k̄`f̄c| Kvi Lv̄bv w̄bM̄Z̄ M̄v̄m̄xq Dcv̄ t̄v̄bi w̄ḡw̄k̄Z c`vt̄_©Ab`Zg
nj Hydrogen Sulfide (HS) I Ammonia (NH₃), Suspended Particulate
Matter (SPM), Oxides of Sulfer (SO_x) I Nitrogen (NO_x), Carbon Monoxide
(CO), Carbohydrates Ges Volatile Organic Compounds (VOC)|

Atomic power generation Gi ḡv̄a't̄g e'eüZ BD̄t̄i w̄bq̄g nt̄Z Dr̄cb̄eR̄©
gvbe ḡZ̄l nt̄Z cv̄t̄i | G Rv̄Zx̄q eR̄©c̄w̄bi ev̄ ev̄Zv̄t̄K ḡv̄iv̄Z̄K f̄v̄te `w̄t̄Z
K̄it̄i | w̄ek̄l th me t̄ t̄k c̄w̄b w̄e`ÿr̄ t̄m̄Lv̄t̄b Atomic power ḡv̄a't̄gi
m̄v̄v̄t̄h̄" w̄e`ÿr̄ Dr̄cv̄`b Kiv nq| hvi dt̄j f-Mf̄©c̄w̄bi mt̄_ Dct̄ii c̄w̄bi
`w̄t̄Z nq| m̄vaviY cv̄iḡv̄w̄eK w̄e`ÿr̄ t̄K`ac̄w̄i P̄j t̄b 5000 j`ÿ Kw̄o t̄ZR̄w̄Ḡ
w̄dkb `è" `Zix nq hvi Aw̄Kv̄st̄ki Aav̄q̄Av̄Z ÿx̄Y I GK-`B̄ eQi Rgv̄_vK̄vi
ct̄i ùḡK̄x̄bv̄k nq| Z̄te w̄KQ̄ȳeR̄© t̄ZR̄w̄ḠZv GZB ḡv̄iv̄Z̄K th 10,000 eQi
ch̄S̄ GKB _vt̄K| t̄P̄t̄iv̄t̄b w̄ej I DBǕt̄-j `M̄Öv̄q w̄dkb `è"m̄ḡr̄ m̄=üȲ©
t̄ZR̄w̄Ḡi f̄c̄ ev̄q̄Ḡt̄j Q̄v̄t̄q c̄t̄o| Df̄q `M̄Öv̄q eS̄v̄ hv̄q KZUv̄ M̄vp I M̄fxi
w̄bD̄w̄K̄evi ev̄ t̄ZR̄w̄Ḡ eR̄© w̄ech̄©, (Kuei 2001)|

Am̄ÿ I tīv̄M̄v̄st̄K m̄P̄w̄K̄rm̄ w̄ t̄q m̄ÿZv̄ w̄d̄wi t̄q w̄ t̄Z c̄ÖÁv̄e× n̄v̄m̄cv̄Zv̄j I
w̄K̄bK_t̄jv̄| Gi mt̄_ tem̄iK̄vix t̄m̄ēm̄s`v̄ t̄jv̄ Zv̄t̄ i w̄P̄w̄K̄rm̄vi m̄ÿ`e`v̄ Öv̄iv
R̄bM̄t̄Yi m̄w̄eR̄ c̄Öv̄k̄v̄ ciȲ K̄it̄Q| t̄ t̄ki miK̄vix `v̄r̄t̄m̄ev̄ c̄ÖbZ BD̄w̄bq̄b
ch̄v̄q, Dct̄R̄jv̄ ch̄v̄q Ges t̄R̄jv̄ ch̄v̄q w̄ef̄³| G m̄K̄j ch̄v̄q t̄ t̄KB Kw̄b
eR̄© Aw̄Kv̄st̄ki D̄m̄© nq, hv̄ nt̄"Q i³ m̄sp̄ūḡZ e'v̄t̄ÜR, m̄B, m̄sp̄ūḡZ i t̄³i
fv̄q̄j Ges e'eüZ w̄m̄īÄ| GZ w̄P̄w̄K̄rm̄v̄ eR̄©c̄Öw̄bq̄ZB cwi t̄ek I gvbe `v̄r̄t̄K
AeȲw̄zi w̄ t̄K t̄Ūt̄b w̄t̄"Q| Ab`w̄ t̄K Aēt̄njvi `īāl m̄'vj v̄t̄bi tev̄Zj, cv̄Bc,

vetkI Z: Kvi Lvovi gvŦS U'vbrix, e'f WvBiqs ukŦi i vb:MZ eR@gn Gi Avl Zvf³ |
eR@ŦZ cwi tek evŦe `e' Drcv`b

Ŧ`Ŧki mKj RvqMvi wj, Kvi Lvov, MŦni eR@gn cwi tek wecbœŦ⁰ | GŦZ
kni I MŦgi gvbeRxeŦb Ŧbtg AvmŦQ Pig `ŦFMŦG `ŦFMŦ nŦZ cwi ŦvŦY
Dcvq eR@Ŧkrab I cy:cŦQvKiY | KviY GŦZ Avgiv `ŦvŦe jvŦevb ne: GK:
cwi ŦkwaZ eR@ŦŦq A_ŦZK Dbae mœ, `B: Gi gvS w'Ŧq cwi tek `ŦYgy
ivLv mœ | KwB, Zij DfŦq eR@Ŧ gviVZK ŦvZKi nŦj I cwi ŦkvaŦbi e'e'Ŧ
vbŦj Zv ,iz;ewx cŦe | eR@ZLb UvKvi vebŦgtŦl vewŦ nŦe I Zvi vevŦPZ
nŦe A_Ŧix mœ' iŦc |

eR@ŦZ mœ`

eR@Ŧh ŦkeŦ cwi tek I gvŦŦe ŦvZ KŦi Zv bq Gw DcKvi KŦi | eR@KQz
gvŦŦi AvŦqi Dm | h_v_ cwi ŦkvaŦbi gvŦŦg vevœa `e', Dcv`vb `Zwi KŦi
Ŧ`Ŧki A_ŦZŦZ cŦe ivŦL | wKs' AvgvŦ' i Ŧ`Ŧk mWk Ávb-aviYv, mœ`
D'ŦŦbi Dcvq, e'vck cŦi bv_vKvq eR@AvRI AveRbv gqv vnmŦŦeB cwi MvZ |
Zv`ŦŦj wKQzv th D'ŦŦeb nqv Zv bq | GLb Avgiv Ŧ'Le wKfŦe eR@ŦZ
mœ` `Zwi mœ, Ŧ'kxq I DbZŦ`Ŧk MŦxq e'e'Ŧl GŦŦŦŦ AvŦj vPbv Kie:

AvŦqi Dm vnmŦŦe eR@

``vbK e'envh@ngMŦngŦqi e'evŦŦb cwi bZ nq eŦR@hv cwi Ŧekev`Ŧ` i fvŦvq
mœ` | G eR@KŦqK nvZ, Kvi Lvov NŦj wmvBwKs-nŦq cwi YZ nq mœŦŦ` I Zv
wKQzgvŦŦi RxeŦ avŦŦi Dcvq | D`vniY vnmŦŦe mvŦvi evBcyj GjvKv msj Mœe
XvKv idZwb cŦQvKiY GjvKv ev BwŦŦRW Gi K_v DŦjŦ | GjvKvi ŦQvU
ŦŦj-ŦŦŦiv iwOb Kvctoi `c nŦZ Kvco evQvB KŦi gnvRbŦK evŦŦq w'Ŧq
``vbK 25-30 UvKv Avq KŦi e'evi nŦZ w'Ŧq cwi evŦŦi AbUb nŦm KiŦQ |
evQvBKZ.G Kvco Kvi Lvov wŦŦq cŦvq cŦZ nq Kvctoi bZb wRvb:
ŦQvUŦ' i ŦcvkK, ZŦv, mŦv | cŦZKvi KŦi i nvRvi nvRvi UvKv AvŦqi `Ŧ-nŦ'Q
ŦAveR@Ŧ | KvŦRB Avgiv ejŦZ cwi, AveR@Ŧ i ayŦvSv bq GwU wObge I `wi`
RbŦMvxi AvŦqi DŦŦmi mvŦ_ A_ŦZK ŦŦŦŦKI cŦeZ KŦi | ewZj `e'w
vbŦq MvZ fvŦvwi e'env ,Ŧj vB gj-Z: A_ŦZK cŦeK |

eR@ŦZ vmtgU

Rvcv nŦ'Q Ggb GKw Ŧ`k hv DrcbœR@K mWk I DrKô.fvŦe KvŦR j vŦŦZ
mŦŦg nŦŦQ | Rvcv mŦŦŦi R eR@Ki wmvBwKs-KŦi cy:e'envi DcŦhvMxZv

Gi BtKv I m'wbUktbi Ūvbō`tqi wgwj Z ifc BtKvmb hv cwitekevŪe |
 tttKvb RvqMvq`vcbyg I UqtjU Rjevqy Zvcgvīvi wfwE+Z gvbe DwrQó
 (gjgTtK) tK 3-6 gym atī KvhRix`Re mvti cwiYZ Kti Kul.tyTl e'envti
 LqB ctRwlf dj cvlqv hvTQ| KviY gvbe gT BDwivqī veKí, gvbe gj
 BDwivq I WJGmici veKí wmvte e'envi jvfRbK| G Uqtjtu gvbe BDwib ev
 gT I vclmR ev gj c_K tPvti msMynZ Kiv nq| veKl fite cŲ G j`wUB
 e'enviKvtj gj j`wUBi tPvti I BDwib cipeZx@KbtUBvti Rgv nq|
 e'envti ci GKgm OvB tXtj`MŲ I tcvKvi Dc`e wevbk Kiv nq|
 e'enviKvix metēI cvtKb`wcZ Gbj wKbRs G wltq tkSPKg@kl Ktib|
 AtbtK Avgi gjgT GKt Rgv Kti mvi cŲ Ktib| mviYZ epr AvKwZi
 BtKvmb UqtjU .tjtZ vclmRtKkb cŲqvq e'vKtUwqv I`MŲ bvg Kti Zij
 mvi cŲ Kti Kul..KvR e'envi Kiv nq| G mvi cŲ 1 eŲi atī cŲqvaxb
 ttL cti e'envi Ktj ywzi m'wb AtbKvstk nfm cvq|

Dbze wetk| 37 WMO98.6 WMOdvtibnvUB Zvcgvīvq`vtgŲvij K Kti
 KtUwv s mvi cŲZ wDg'wvDi ywzi AiMvbRg aesm ntq hvq| evsj vt tki
 KtvcZiv cŲoi Rjvex tKkecti KtqKw MŲ BtKvmb UqtjU DrcbŲRe
 mvi Kul.Kvt@vcK mvov tdtjQ| G UqtjU D'wEZ gj RvZx`Re mvi Kul.tZ
 e'envi Kti evkwovq MŲgi kZwaK KIK evūvi djb tctqtQ| G AAtj
 Avgb avb Prtl`Re mvi e'envi`B weNv RvtZ 75 gb avb cvlqv tmTQ| G
 MŲgi KIK Avaj gvbe cŲZU Uqtjtu`Re mvi 8Ųk UvKv qK KtZ
 DrcwvntqtQb G mdz`kŲ| Ab`KIK Ave`v gavi fvl`G eŲi wzb BtKv
 Uqtjtu mvi w`tq 20kZK RvtZ eiew jwltq cŲ mBvtn 80-85 tKvR
 eiew tctqtQb hvZ Zvi Avq ntqtQ 6 nvRvi 280 UvKv| G MŲ BtKvmb
 Uqtjtu`Remvi cŲtM gwUj DeŲz evx tctq AvjwcvR, imly, avb, Wvj
 RvZxq dmj Ovovl kvK-menri e'vcK djb ntqtQ (`wbK BtEdvK, 4
 tmTŲt 2010, kubevi)|

eR'ntZ Rvj vbx Kw

wmwmōi eR'e`tcbvq MpxZ e'e`w i gvtS eR'ntZ Kw D'wEb dj cŲ
 GKw Df`wM| bvj v-bl gŲtwB, Wv`web msMynZ eR'G Kw`Zii i Kulvgj |
 2005 mvti i 9 GwŲ PAMŲgi nwj kni GjvKv 125 GK i RvtZ wmwmo
 eR'wvūs AAtj ev rvtb wzb tkwU UvKv e'tq m'vŲQ`kxq cŲtZ Mtō
 DfVtQ G wBtgU cŲ| G cŲU`wbK 8 Ub Kw DrcbŲ| cwitek`tY gŲ
 G Rvj vbx Kw ewvR`K wfwE+Z cŲg Ovov ntj I GLb ex AvtQ| eū tjtKi
 Kg@tcbKvix G cŲUj Kw .tj v wmwmōi i v`li Kvth`Rvj vbx wmvte e'envi

Re mvi Drcv` b cj x bvtg AvL`wqZ Kiv ntqtQ| gvĬ 13/15 w`tb %Zwi m=ē weavq cĀvRbvbyvqx mvi cĀZ Kti RngtZ w`tZ myg nI qvq KIKt` i tK mvti i Rb` AtcŸvq _vKtZ nt`Q bv|

cĀZ eQi mvi tKtjsKwii i NUbvq KIKt` i gvtS mvi wbtq th nrvnKvi `i iæ nq Zv wimb m=ē hw` gZje _vbi KIKt` i cšv Aej =b Kiv nq| GtĬ Dĭj b` th hLb ivmqubK mvi D`m ē nqub ZLb wKš' M"n`vj xq ci t` i weōv wlvqZ mvi B wQj dmj Drcv` tbi ev Awak dj b jvtfi Ab`Zg Dcvq| kni I bMtii eR`cĭjv GKwĬ Z Kti wtkl cĀvq KveŸ WvB-A- vBW cwi Z`wM Kti DrKó. `Re mvi Drcv` b m=ē GtZ eR`cĭ i ntZ mvti Awak Pwn`vl ciY nte| evsjvt` tki ifcMĀ tRjvq cĀZwZ cĀv wJ Gi cĀó. D`vniY| ZvB t`Lv hv`Q AvMvgx w`tbi Lv` wbi včĒv wĀZKI tY `Remvti i Drcv` b I Zvi µgeµx AZ`vek`K (w`bK BtĒcĬvK, - 5B Rvbyvix 2010)|

evtqM`vm

DbZetk| b`vq evsjvt` tkl RjevqycwievZŸRvZ fvimvg`nxbZv t`Lv w`tQ| Zte Zĭbvĭj-Kfvte Zv cĀe tekx Gi KviY nt`Q RbmsL`waK", `wii`Zv, tŸS Mwj K Ae`vbRvZ cĀvZK `jvM, Acwii Kvi Z I AvbqvšZ bMivqb, Rvj vbi AfveRvZ ebfvg nfm, ivmqubK mvi I KxUvkk e`envi Awak, tčš i etR` h_vh _w`vkb bv _vKv, mtPZbZv I cwi tek ivq Aetjv, ivR`wvZK AvwKvii h_v`cĀvM BZ`w` i Rb` AvR G` `| Gi gvĬvtK Avil evot`Q MĀ AvavKxKiY cĀvq| Gme ntZ cwi tvtY metPtq KvhKix c`tŸc nt`Q etR` h_v` e`vcbv, mtPZbZv evx cwi tek i vĭj-K, `IYxq `ē`w` ntZ e`envi DcthwMx `ē` Drcv` b I Zvi e`envi wĀqZv weavb BZ`w` ZvB ejv hvq evtqM`vm Rjevqy IYRvZ AeŸq wKvZv ntj I nfmKtY mdj nte| Gi Ab`Zg KviY nt`Q evtqM`vm cĀv i e`envi cwi "Qbcvĭ vbx, DbZē `Re mvi, `IYgŸ `v`Ki I cwi "Qbcvĭ tek cĀv m=ē nte| evtqM`vm nj cBkxj `Re c`v`qhg b tMvei, gj gĬ, AveRŸ, KPzxcv, MvQmQvj xi cvZv BZ`w` evZvtmi Abv wZtZ cĀvPtq cĀZKZ. M`vMB evtqM`vm, 60-70 fivM vĭt_b mgx GM`vm Rvj vbi tč e`envi DcthwMx I KveŸ WvB-A- vBW M`vm Drcv` tbi ci AenKóvsk DrKó. gvtbi `Re mvti ifc tbq|

evtqM`vm cĀv i 2wJ gĬWj h_v: 1| w`f gĬWj I 2| fvmgub gĬWj ev tWg gĬWj wef³| fvmgub gĬWj 2wJ Ask Gi wbtPi Askw WvBtRvUvi I M`vmRgvKZ. Astki bvg M`vm tnvi vi | Drcv` b gĬWj mĀi gĬS AvsukK wgvŸZ fvmgub tWtĭg Rgv I GtZ M`vm Drcv` b evx i mvt_ tnvi vi wJ Dcti i w`tK Dĭv M`vtmi Pvc AcwievZŸ ivtL| Zte w`f tWg gĬWj i M`vm tnvi vi bv

_vKvq M'vm gwUj wbtP Rgv nq| eR^ntZ Drcw` Z G M'vm wZZvm M'v'tmi gZB e`envi Kiv mnR, g`vUj tRtj n`vRvK jvBU Rvjv'tbv, tRbvtiUi mnvqZvq we`y Drcv` b Kti Btj KUbK hš;Pvjv'tbv (t'ghb wUwf, tiwWI, d`vb, jvBU, wW.wm.wW), cvt`ui mnv'th` Rvigi tmPKvR, MvortZ Rvjv'vxi'fc e`envi, Lv` `e` (djgj- I me'R) msi`yY BZ`w` m'avejx mnt`RB cvlqv m`e' e'vtqM'v'tmi gva'tg| GQovov th Aekó `Re mvi cvlqv hvq Zv w`tq gvki'g, gvQ, tKtPv Pvl mnR nq| `Re mvi cQvM exR A`zi'v` Mg AwZ mnR nq|

e'vtqM'vm cdui wbgP LiP AZUv euj bq| m'aviYZ 7/8 m`m` wenkó GKUJ cwievti i`wbK ivbce ivtZ n`vRvK jvBU e`envti w`tb 3 Nb wguvi M'vm Drcv` t'bvq cdu wbgP LiP (n`vRvK jvBU, evbP BZ`w` mn) t`Lvb nj: w`i t'Wwg g'Wj 14 nvRvi UvKv, f'imgvb t'Wwg g'Wj 16 nvRvi UvKv jv'tM| i`wbK cdu 60-70 t'KvR t'Mvei cduRb hv 5-6Uv M'æev 3-4Uv gwvl ntZ ev i`wbK 40-50 t'KvR nv'g'jMxi weov 400-450 wU nv'v-g'jMx t`tK mnt`RB cvlqv hvq| GQovov i`wbK 100 Rb t'jv'tKi gj Øvivi GKB cwigvb mvi Drcv` b m`e'|

e'vtqM'vm cQZ G RvZxq Dcv`vb evsjvi cQ M'Qg we`g'vb wKs' AAZv I cdu wbfP cQj x Avb bv _vKvq Zv wbgP Z_v e'vtqM'vm cdu wbgP m`e' nt`Q bv| Zte eZ'qtb G Ae`vi Dbq' nt`Q mvi'tk 25 nvRv'tii Avak e'vtqM'vm cdu i`wbK 24 jvL Nbdh M'vm Drcw` Z nt`Q hv I cduvZ ivbce Kvth` e`euz nt`Q (i`wbK Bt'EdvK 9B gvP'g'j'eri 2010)| G e'vtqM'vm cdu t'K Avil Gw'tq wbt`Q Avi wAviGm| Zviv t`Li'tP e'vtqM'vm cdu wbgP cš' D`w'eb Kti'tQb| G cš'q M'Qgi GKUJ Mui e'cwievi gv` 20-30 nvRvi UvKv e`tq e'vtqM'vm cdu wbgP Kitz cvite| AviwAviGm Avil LiP Kvg'tq gv` 12 nvRvi UvKvq mdj f'ite e'vtqM'vm cdu wbgP m'yg nt'q'Q hvi bvg ivLv nt'q'Q AviwAviGm g'Wj e'vtqM'vm| AviwAviGm cQg ch'q evRv'ti cQZ tmtbUwvi j`wU'bi Rb` Zwi wis` w`tq 4 wis` wenkó g'Wj e'vtqM'vm cdu 18 nvRvi UvKv cQZ Kti| e`tqi cwigvb Kvg'tZ 2 wis` wenkó e'vtqM'vm cdu 17 nvRvi UvKvq cieZ'Z wbgP Kti AviwAviGm| me'R I wis` wenkó e'vtqM'vm cdu wbgP Kti 12 nvRvi UvKvq hvi w'ekIz'nj cduU cdu 6 d'z BwA e`vm hvi M'vm t'Wwg 6 d'z 8 BwA t'd'v'vmt'gU Kv'g'vj ntZ cQZ hvi t'vqz'j'Avak|

AviwAviGm M'telYv Kti t`t'q' 4wU M'æmgx 1wU cwievi F'tYi gva'tg G cdu e`envti e'vtqM'vm Drcv` b Kti ivbce KvR Pvjv'tZ m'yg| cduU 40 t'KvR cwigvb t'Mvei w`tq GKB cwigvb M'vm Drcv` b m`e'| Zviv Avil e`v'c'K'f'ite M'telYv Kti t`t'q'Ob 120 t'KvR AveR'bv w`tq GKB Ab'v'tZ e'vtqM'vm Drcv` b m`e'| ZvQovov 30 t'KvR t'Mvei I 90 t'KvR eR^c'Øvivi GUv Kiv m`e'| AviwAviGm D`w'ez G cdu evsjvi cQ M'Qgi Pv'Åj` m'w' Kitz m'yg

ntqtQ| GLb MŃgi AþK RvqMvqB G cŃi e'envi nt'Q e'vcK nvti (`wbK BtEđvK 17 Rvbwix 2010) | PÆMŃgi tjvnmvovq 2001 mvtj DcþRjv mgvRtmev cŃi Aaxþ 20 nvRvi UvKv e'tq 3 NbwgUvi M'vm Drcv`b DcþhMx 1wU w'f tWvg nq| hv w' tq n'vRvK j vBU Rvj tþv l ivbrieKvR m=úv`b Kiv ntZv| GLb G DcþRjvi cŃi GJvKvq tcvj w'advq@vKvq AþK cwi evti cŃi wji e'envi evotQ| GtZ Kti ebivmRi Dci evotZ Pvc AþK Ktg tMtQ| tjvnmvov QrovI AþK cmvov GJvKvq evtqvM'vm cŃi cŃi e'envi evotQ| Gi gvtS PbwZ GJvKvq AvæK nvti evtqvM'vm Drcv`þbi Rb` GJvKvUv evtqvM'vm wWþRj bvtg AwfwnZ nt'Q|

etRŃ `MŃvimb

eRŃh i'ayRvqMv `Lj Kti ev Qvotq t`þK cwi tek `HY KiþQ Zv bq ei Â Gi `MŃ e'vcKfvte cwi tek `HY NUvt'Q| etRŃ MŃÜ bvbwea kvm-cŃi RvbZ tivtM Avpvsnt'Qb bMievmx Z_v mgMŃetk| gybeRwZ| fvitiZi cly tcŃi Ktcfi kþi 1 nvRvi tgvUK Ub etRŃ 7k tgvEK Ub `Re cŃiZi hvi `MŃ `væh| hvþZ bMievmi `vfwæK Ræbhv'v e'v'nZ nt'Q e'vcKfvte| Rvcvb G mgm'vi mgvavþ BGg-Gtdwæf gvBt'vAMŃOR D'væb Kti| Rvcvþbi w' DvKqm vekþe`vj tqi tUi tgvnmv 1982 mvtj GwU D'væb Ktib| GK vj Uvi BGg Gi `vg 115 igx hv e'envi Kiv nq eRŃcPbKvj | wZb vj Uvi o l 1k vj Uvi tKwi bvenþb cwbþZ GK vj Uvi BGg vgnktq 1wU Wþg 7 w' b tþL t`qv nq Gici Avil cwb vgnktq etRŃ Dci vUvUþ t`lqv nq AvbgywbK 45 w'þb GB eRŃ mvti cwiYZ nq| cly tcŃi Ktcfi kb 2002 mvtj i Rvbwix gvtm 2k tgvUKUb etRŃBGg w' tq cix'vgyj-K KvR PjyKti| G cŃi KvRi nIqvq 7k Ub etRŃ BGg cŃiM Kiv nt'Q hvi `wbK LiP 1,500 igx| Gfvte i'ayth `Re mvi-Gi Kt'vutþi gvb Dbzent'Q Zv bq eis 20-30 w' b AvtMI mvi cŃi mæc nt'Q (cwi tek cŃi, el Ń, RjvB-tmtþæi, 2002) |

gvþQi Avk ntZ A_Ń

gvþQi AvkuntZ wecj cwi gvb wæþ wK gyv DcvRŃmæc| RjvwdKv tvntmb bvgx evsvþ kx GK e'emvqx cwi Kvq t`þL gvþQi Avtku e'emv i'æ Ktib| g'vw gtKv bvtg Zvi Kvi Lvbv Bþ`vþvkqv, _vBj`vÜ, Rvcvþb gvþQi Avku Bvbx Kti ermþi 08 tKwU UvKv Avq KiþQ| mv`vibZ gvQ KvUvi ci tKvR aþi Avku wKþb Rgvþv nq| wæfvbck'wgþKj w' tq aþq tivt` i'wKtq ggvj cwi`vi Kti tetQ c'vtKU Kti wæþ tk i Bvbx Kiv nq| Avku`þK tKvivRb cvDWvi %Zwi Kiv nq hv wæfvbceI a %ZwiþZ KvþR jvþM cŃi abx wætkI Z vj wæv=K, tþj cwj k Gi D¾j Zv evotþZ G cvDWvi e'envi Kiv nq| jvcŃŃ gvbe kixþi Pvgov cŃi`vctþ K'wWvgqv wdk Gi tZj e'envi nq| Rvcvþb Uz tc÷, mgy, wæfvbce

ivbap gvtQi Avk e'envi Kiv nt"Q| Kwlg tPvtLi tj Y `Zwi tZI gvtQi Avk
 e'envi Kiv nq| Bt`vtbnkqv gvtQi AvktK Mvj tq Zij c`v`cZwi Kti Zv
 w`tq Kwlg gYv Drcv`b Ki tQ| hv w`tq Mqvb cCZ Kti erm ti cQ 08-12
 tKwU UvKv Avq Ki tQ| KvRB ejv hvq tdtj t`qv gvtQi Avk t`tK A_©
 DcvRDi Rb` D`"m cQvRb| GtZ Kti Kgms`vbi gva`tg teKvi Zi nvtmi
 mvt_ AwaK `et`wk K A_ Avq t`tki A_ %WZK cQ`xZI cDe ivLte|

Dcmsnvi

eZgb wek| th nvti Rvj vbx kw³ e'envi nt"Q ZvtZ AvMvgx 2047 mvtj
 cWZK M'vm, 2080 mvtj tZj I 2180 mvtj tZj I 2180 mvtj Kqjv
 vb:tkl ntq hvte| iayZvB bq G RvZxq Rvj vbx i ywZKi cDe cWZK
 cwitek wech`nte gviwZKfvte hv cQY GLbB cvlqv hv"Q| AwZep, yiv,
 giKiY, Rjeqvwech, ungev n Mjb BZ`w`i KviYB Rvj vbx i AwZ Pwin`v
 vbeviY I Aevta ey vbab|

ersj vt`k th Gi t`tK gY `vKte Zv bq| ZvB er tqM'vm cQ`i e'envi Rvj vbx i
 Pwin`v wUvtbvi cvkvcnk KwL R mvi cQ`i vbDqZv w`te| GtZ cwitek `HYgY
 ti tL Lv` Pwin`v wUvtbv m`e nte hv Dbze Abyz mkj t`tki Rb` Ri ax|

ZvB eR`@e`vcbvMZ mgm`v mgra vbi cvkvcnk cwiz³ eR`K wimvBwKstqi
 e'e`v vbZ nte| GtZ Kti wKQlv ntj I Kgms`vbtK Avgiv evovtZ cvie|
 cwitek evUe %Re mvi I `Re Rvj vbxq Drcv`b I e'envi evovtZ nte|
 ivmvqvbK mvi th iaygvEKvi ywZ mvab Ki tQ Zv bq, GwU cwitek l gvbe
 `v`tK w`btK w`b AebvZi tkl mxgvbvq vb tq hv"Q| ZvB `Re mvti i e'envi
 gvEKv `HY tvtai mvt_ gvbe `v`i ywZKvi K vYvi tvtMi cQ`v e| Kgte
 etj Avgiv Avkv Kw i|

Dbze t`tki eR`msMDe`vcbv I m`u` cCZ cQ`vqtK cQ`b` w`tZ nte|
 AtbK mgq Avgiv t`wL AtbK tgavex D`vEK `t Li tP cwitek evUe wevfbce
 cQ`vq D`vEb Ki tB| wKs`At`cQ`v fite Zv e`wvR`Kfite cQ`i Ki tZ cvtib
 bv| GtY tI mi Kv i tK A_ m hveZxq mnvqZv w`tZ nte hv D`vEZ cQ`v wU
 cQ`b Kiv hvq| GtZ Kti eR`K m`ut` cwiz Kivi gva`tg Zvi ywZi
 nvinmKiY m`e nte|

MÖ

fBqv, Ave`y gvtj K (1999): cwitek `HY I vbqSY (2q LÜ), PÆMÖ, tinvbr
 Kiv uDUvi GÜ wCÖmP

fBqv, Ave`y gvtj K (1999): cwitek `HY I vbqSY (1g LÜ), PÆMÖ, tinvbr

Kivuduvu Gu wdom |

Avjg, tk Avkivdz (2008): fymj l cwi tek tkvl, XvKv, tniv wdom

Avngb, tgv: m`ij (1995): cwi tek weAvb gvEKv Rxe l %Re mvi, XvKv, evsj v GKvWgx |

Kvei, tgvrvs` ugvqj (2001): cwi tek tkvl, XvKv, emjiv tca`vU cvej tkKy` wj wgtUW |

Lvbg, Kvgily bnvvi (2001): nek|cwi tek l gvbeRvZ, XvKv, AtsNv wdom |

MYcBZs` evsj v` k mi Kvi (2001): cwi tek AvBb msKj b, XvKv, cwi tek l eb gsbj q |

MYcBZs` evsj v` k mi Kvi (1995): b`vkbj Gbfvqi Ytgu g`vBrtgu G`vKkvb cxb (tbgv), fuj q`g 1 we: mvi mst`yc, XvKv, c`DmF G`Uvi c`BR tcm wj wgtUW |

tP`aj, Kvgifj Bmjvg m`uw`Z (2000): evsj v` k cwi tek wT 1406, XvKv, evsj v` k cwi tek misew` K tdvvg(GdBtRie) c`Kkvb |

gvbi`yvgvb, Gd.Gg.(1996): wecb`cwi tek l evsj v` k, XvKv, Avng` cvej wks nvdM |

wgv, tgvrvs` Rqbj Avte`xb (1994): evsj v` k fig`HY, XvKv, AvMgx wdom`GU cvej wks tkvs, evsj v` k Kul.wekte``vj q, gqgbvmsn |

ingvb, AvRRj (2002): ivmvgwbK KxUvbkK: weKí e`e`v M`Y bv Kitj a`sm ntq hte grm m`u`, XvKv, tgsj c`Kkvb, evsj v` evRvi |

wi qvRDw`b, tgv: (2005): cwi tek `H`Yi bvbw`K Ges`HYtva KiYxq, XvKv, AvMgx wdoms GU Bmjvg, tZ`idKj (1999) 0l`Rvb `fii`yq ewx: RxeRMtZi Rb` ugvk``yc0, `wbK evsj v` evRvi, 17

^`wbK cwi Kv

Kvtj iKU |

w` tWBj ÷vi |

^`wbK ce`KvY |

^`wbK c`G Avtj v |

^`wbK BtEdvK |

cwi tekT

el 3, msL`v 2, Rly 1999 |

el 4, msL`v 3, At±vei-w`tm`r 2003 |

el 4, msL`v 4, Rvbgvi-x-gvP`001 |

el 5, msL`v 4, Rvbgvi-x-gvP`002 |

Website:

Environment Department - <http://www.doc-bd.org> .

United States Information Service-<http://www.cilechco.net/usdhaka> .