



Figure S1. Map of the study district (Toba Tek Singh), Punjab, Pakistan.

Table S1. Analysis of variance for Cd metal in soil, in forages and in animal blood, hair and faces.

Source	Degree of freedom	Mean Square	Sig
SOIL			
Site	2	3.629***	0.001
Soil	4	1.021*	0.013
Site x soil	8	0.507**	0.097
Error	30	0.267	
FORAGE			
Site	2	9.455***	0.001
Forage	4	1.937**	0.013
Site x forage	8	0.713ns	0.097
ANIMAL BLOOD, HAIR, FECES			
Site	2	19.663***	0.001
Animal	2	0.602 ^{ns}	NS
Source	2	0.614 ^{ns}	NS
Site x Animal	4	0.627 ^{ns}	NS
Site x Source	4	0.97 ^{ns}	NS
Animal x Source	4	0.817 ^{ns}	NS
Site x Animal x Source	8	0.729 ^{ns}	NS

ns insignificant. * Significant at 0.05 level, ** and *** Significant at 0.01 and 0.001 level.

Table S2. Analysis of Variance for Cu metal in soil, in forages, in Animal blood, Hair and Faces.

Source	Degree of freedom	Mean Square
SOIL		
Site	2	37.001***
Soil	4	0.802ns
Site x soil	8	2.047ns
FORAGE		
Site	2	86.37***
Forage	4	4.873ns
ANIMAL BLOOD, HAIR, FECES		

Site	2	20.164***
Animal	2	0.461 ^{ns}
Source	2	16.571***
Site x Animal	4	1.13 ^{ns}
Site x Source	4	0.431 ^{ns}
Animal x Source	4	1.066 ^{ns}
Site x Animal x Source	8	0.893 ^{ns}
Site x forage	8	6.392**

ns insignificant. *Significant at 0.05 level, ** and *** Significant at 0.01 and 0.001 level.

Table S3. TREATMENT DETAILS .

Forages	Cattles	Body organs	Sites/Location	Metals	Measurements	
<i>Sorghum bicolor</i> Kuntze	Buffalo	Blood	Site I	Cd	Bioconcentration Factor	BCF
<i>Sesbania bispinosa</i> (Jacq.) W. Wight	Cow	Hair	Site II	Cu	Pollution Load Index	PLI
<i>Cynodon dactylon</i> (L.) Pers.,	Sheep	Feces	Site III		Enrichment Factor	EF
<i>Suaeda fruticosa</i> (L.) Forssk.					Daily Intake Of Metal	DIM
<i>Tribulus terrestris</i> L.					Health Risk Index	HRI
					Milli Gram Per kg	mg/kg
					Milli Gram Per Liquid	mg/l