ナンコクエ橋 環境チェクシート (上流側)

SURVEY DATE	:29 Dec. 2004, 6 Jan. 2005	LOCATION NAME	ridge , existing bridge was settled by flood) NANKOKUWE BRIDGE		LAT:S14°17'28.4" LNG:E34°31'21.4" ALT:537m	
VEATHER	:SHOWER/CLOUDY	ON TOWN A DOTA	600*200m=12ha	(included river area, 300m	n each side from center of bailey bridge, 100m each side from center	
SURVEYOR	:HIGA/MAKWINJA	SURVEY AREA	of existing road)			
SKETCH	:HIGA(No scale)		CONDITION OF EACH		TIDOWN AND ADDA	
Legend OO Existing Bridge		N	ENVIRONMENTAL ITEM AIR POLLUTION		UPSTREAM AREA	
					No relation	
Existing Road		1847	WATER POLL UTION SOIL POLLUTION	River Dimension	See Topographic map	
Facilities, Inh	abit.	333°			Q= width 15m*depth 1.0m*1.0m/s=15m³/s (23rd Dec. visual survey)	
				Flow	Q= width 15m*depth 1.5m*2.0m/s=45m³/s (24th Dec., visual survey)	
	350mV 11 Inhabitants (3houses			Turbidty,PH, COD		
	in Row, Shouses out of				No relation	
	Row)	i	WASTE TRAFFIC ACCIDENT		Quarry (Kapiri, +10km distance), Borrow and Gravel Pit (Njolo, +5km distance)	
	V					
Maize V V Cassava V			AND SECURITY SITUATION		Interview with Salima traffic police station (see interview result)	
			WATER USAGE		Irrigation, Washing, Water place for livestock	
	V V 00		DIODU IIDGUIII	Animal Diversity	No relation	
				Vegetation	Maize, Cassava, Banana	
Upstream(Dec.17,2004) Maize V Cassava V Banana V Signboard OO 30m Exitig electricity line about 100m Balaka			BIODIVERSITY	Endangered Species	Nonexistent	
			INHABITATION	In the right of the way	3 (350m Salima side)	
				Out of ROW	8 (350m Salima side)	
				Main industry of inhabitant	Small-scale farming (maize, cassava, banana), Carving(sell crafts along M5)	
			SOUR TENTALEN		Farm land, inhabitation, Livestock's grazing area	
			LAND USE	NP/Wildlife Reserve & Forest	Nonexistent	
		200 000	SOCIAL INFRASTRUCTURE		Electricity line, Kiosk & Bus stop (700m Salima side), Hospital and Mua Mission (I Mt Salima side)	
			VULNERABLE SOCIAL GROUPS		Nonexistent	
			WATER RIGHTS		Nonexistent	
		A STATE SAME	FISHERIES RIGHTS		Nonexistent	
			LOCAL CONFLICT		Nonexistent	
			CULTURAL HERITAGE		Nonexistent	
		In a second property	INFECTIOUS DISEASES HIV/AIDS		Interview with administration in Salima District Hospital (see interview result)	
		Balaka	OTHERS(Disaster)		Due to Flood 2001 exiting pier was settled and river edge has been eroded and scot	

ナンコクエ橋 環境チェクシート (下流側)

URVEY DATE	:29 Dec. 2004	l, 6 Jan. 2005	LOCATION NAME	by Bridge , existing bridge was settled by flood) NANKOKUWE BRIDGE		LAT:S14°17'28.4" LNG:E34°31'21.4" ALT:537m
VEATHER	:SHOWER/C	LOUDY	CLIDATEN ADER			each side from center of bailey bridge, 100m
URVEYOR	:HIGA/MAK\	WINJA	SURVEY AREA			(Anthorities and Control of the Cont
KETCH	:HIGA(No sca	ale)		CONDITION OF EACH		Leigner and Leigne
			ENVIRONMENTAL ITEM		DOWNSTREAM AREA	
Existing Bridge Existing Road OO		AIR POLLUTION		No relation		
		00		BOART MISS	River Dimension	See Topographic map
Facilities, Inh Water usage n	and the same of th	V		WATER POLL UTION	v to the c	Q= width 15m*depth 1.0m*1.0m/s=15m³/s (23rd Dec. visual survey)
water usage p	North I	Maize _v v			Flow	Q= width 15m*depth 1.5m*2.0m/s=45m³/s (24th Dec., visual survey)
N a v	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Cassav V	lephone line Om interval	TYS DIRECT	Turbidty,PH, COD	- The second sec
N Salima	-	V V		SOIL POLLUTION		No relation
	15m Ex	Exitig telephone line		WASTE		Quarry (Kapiri, +10km distance), Borrow and Gravel Pit (Njolo, +5km distance
333°	Signboard abo	out 100m interval		TRAFFIC ACCIDENT AND SECURITY SITUATION		Interview with Salima traffic police station (see interview result)
	T _	Pil. 1.11 211		WATER USAGE		Irrigation, Washing, Water place for livestock
	j 60m	Plantation, Citura		BIODIVERSITY	Animal Diversity	No relation
	! 00	Existing drop			Vegetation	Maize, Cassava, Plantation (2ha)
					Endangered Species	Nonexistent
			Downstream(Dec. 17,2004)	INHABITATION	In the right of the way	0
	structur				Out of ROW	ngesn word min byg sydnay drinin O newstand pod mintane newn
					Main industry of inhabitant	Small-scale farming (maize, cassava, banana), Carving(sell crafts along M5)
				mile. What is		Farm land, inhabitation, Livestock's grazing area
Parting lined				LAND USE	NP/Wildlife Reserve & Forest	Nonexistent
		Proposed Camp Yard 1ha		SOCIAL INFRASTRUCTURE		Telephone line, Drop structure in river, Grave and Bus stop (600m Salima side
	00	oo v	Address of the last	VULNERABLE SOCIAL GROUPS		Nonexistent
		Maize V V Cassava	100	WATER RIGHTS		Nonexistent
				FISHERIES RIGHTS		Nonexistent
				LOCAL CONFLICT CULTURAL HERITAGE		Nonexistent
						Nonexistent
	in.	350m	350m	INFECTIOUS DISEASES HIV/AIDS		Interview with administration in Salima District Hospital (see interview result)
	Balaka		liolo village	OTHERS(Disaster)		Due to Flood 2001 exiting pier was settled and river edge has been eroded and scou

ナンヤングカルバート 環境チェクシート (上流側)

SURVEY DATE	Nanyangu Culvert <u>UPSTREAM</u> :29 Dec. 2004, 6 Jan. 2005	LOCATION NAME	NANKOKUWE (CULVERT	LAT:S14°36'58.3" LNG:E34°44'20.9" ALT:638m	
VEATHER	:SHOWER/CLOUDY	SURVEY AREA	600*200m=12ha (included river area, 300m 100m each side from center of existing road)		m each side from center of bailey bridge,	
URVEYOR	:HIGA/MAKWINJA	SURVET AREA			ad)	
KETCH	:HIGA(No scale)		CONDITION OF EACH		UPSTREAM AREA	
Legend Existing Culvert			ENVIRONMENTAL ITEM AIR POLLUTION		UPSTREAM AREA	
					No relation	
Existing Road		na 📗	WATER BOLL	River Dimension	See Topographic map	
Facilities, Ch	urch, Inhabit.		WATER POLL	Flow	No flow (Dec. 17,2004)	
		UTION	Turbidty,PH, COD			
	V		SOIL POLLUTION		No relation	
	Maize		WASTE		Quarry (Sharape, +30km distance), Borrow and Gravel Pit (Chingamba, +5km dista	
Cassava			TRAFFIC ACCIDENT AND SECURITY SITUATION		Interview with Salima traffic police station (see interview result)	
			WATER USAGE		Irrigation	
T 4 7				Animal Diversity	Interview with NRA Environmental Specialist and local inhabitant	
Upstream (Dec. 17,2004) Maize V Tobacco V Tobacco V 1 Inhabitant in ROW and 3 Inhabitants out of ROW			BIODIVERSITY	Vegetation	Maize, Cassava, Banana, Tobacco	
		30 (0)		Endangered Species	Nonexistent	
			INHABITATION	In the right of the way	1 (90m Balaka side	
		i		Out of ROW	8 (90~250m Balaka side)	
				Main industry of inhabitant	Small-scale farming (maize, cassava, banana, tobacco)	
					Farm land, inhabitation, Livestock's grazing area	
			LAND USE		Nonexistent	
			SOCIAL INFRASTRUCTURE		Nonexistent	
			VULNERABLE SOCIAL GROUPS		Nonexistent	
		→ !	WATER RIGHTS		Nonexistent	
		FISHERIES RIGHTS LOCAL CONFLICT		Nonexistent		
				Nonexistent		
		CULTURAL HERITAGE		Nonexistent		
		INFECTIOUS DISEASES HIV/AIDS		Interview with administration in Salima District Hospital (see interview resul		
		OTHERS(Disaster)		River edge was eroded and scored by flood 2001. River protection by gabion is under construction.		
5 Inhabitants (out of ROW)						

ナンヤングカルバート 環境チェクシート (下流側)

SURVEY DATE	:29 Dec. 2004, 6 Jan. 2005	LOCATION NAME	NANKOKUWE CULVERT		LAT:S14°36'58.3" LNG:E34°44'20.9" ALT:638m	
WEATHER	:SHOWER/CLOUDY	CLIDITELL LDD	600*200m=12ha (included river area, 300m 100m each side from center of existing road		m each side from center of bailey brid	lge.
SURVEYOR	:HIGA/MAKWINJA	SURVEY AREA				Selection
KETCH	:HIGA(No scale)		CONDITION OF EACH			
N .	60m Legend		ENVIRONMENTAL ITEM		DOWNSTREAM AREA	
Salim 1	3 Inhabitant Exi	sting Culvert	AIR POLLUTION			No relation
	(out of ROW) 250m Exi	ting Road lities, Church, Inhabit.	THE POLICE	River Dimension	See '	Topographic map
	Fac		WATER POLL UTION	Flow	No	flow due to dry
304	L	i		Turbidty, PH, COD		
			SOIL POLLUTI			No relation
	V	The second	WASTE		Quarry (Sharape, +30km distance), Borrow and Gravel Pit (Chingamba, +5km dista	
	Maize V V Cassava V V		TRAFFIC ACCIDENT AND SECURITY SITUATION		Interview with Salima traffic police station (see interview result)	
			WATER USAGE		Irrigation	
				Animal Diversity	Interview with NRA Enviro	onmental Specialist and local inhabitant
			DIODH EDGIEST	Vegetation	Maize, Cas	ssava, Banana, Tobacco
	Taylest field		BIODIVERSITY	Endangered Species	Nonexistent	DELBERIGEA MELANOXYLON und the Malawi list (+200m Balaka side)
	Dry riverbed	Downstream(Dec. 17, 2004)	INHABITATION	In the right of the way	partitioner and grants provide	ing 0 ing samue and paintening.
				Out of ROW	3(250m Salima	side), 1(110m Balaka side)
				Main industry of inhabitant	Small-scale farm	ning (maize, cassava, banana)
			LAND USE		Farm land, inhabit	tation, Livestock's grazing area
	THE V			NP/Wildlife Reserve & Forest		Nonexistent
	Cassava V V		SOCIAL INFRASTRUCTURE		School(+350m Salima side)
4	110m		VULNERABLE SOCIAL GROUPS		Nonexistent	
			WATER RIGHTS		Nonexistent	
	40m		FISHERIES RIG	HTS	Nonexistent	
	1 Inhabitant		LOCAL CONFLICT			Nonexistent
	(out of ROW)		CULTURAL HERITAGE		and the second s	Nonexistent
			INFECTIOUS DISEASES HIV/AIDS		Interview with administration in S	alima District Hospital (see interview result
	200m Endangered species	termina y tale constru	OTHERS(Disaster)			by flood_2001. River protection by gabion is

アンゴニカルバート チェックシート (上流側)

Environmental and social check worksheet on each bridge

Name of Bridge1: Angoni Culvert <u>UPSTREAM</u> (Temporary existing pipe culvert (width 16.5*length 19.3*height 2.6m)) SURVEY DATE :29 Dec. 2004, 6 Jan. 2005 LOCATION NAME | ANGONI CULVERT LAT:S14°36'58.3" LNG:E34°44'20.9" ALT:638m WEATHER SHOWER/CLOUDY 600*200m=12ha (included river area, 300m each side from center of bailey bridge, SURVEY AREA SURVEYOR :HIGA/MAKWINJA 100m each side from center of existing road) SKETCH :HIGA (no scale) CONDITION OF EACH UPSTREAM AREA Legend ENVIRONMENTAL ITEM Church Existing Culvert AIR POLLUTION No relation Existing Road River Dimension See Topographic map Facilities, Church, Inhabit. Church WATER POLL Flow No flow (puddles in river, visual survey, Dec.17,2004) UTION 110m 30m Turbidty, PH, COD SOIL POLLUTION No relation Brick yard 25m WASTE Quarry (Sharape, +10km distance), Borrow and Gravel Pit (Kalungama, +5km distance) Maize v TRAFFIC ACCIDENT SALIMA Cassava Interview with Salima traffic police station (see interview result) AND SECURITY SITUATION WATER USAGE Washing, Water place for livestock Interview with NRA Environmental Specialist and local inhabitant Animal Diversity Sugarcane, Vegetation Maize, Cassava, Banana, Papaya, Sugar cane BIODIVERSITY Papaya, Endangered Species Nonexistent In the right of the way 2 (200m Balaka side) Dry river bed Out of ROW 13 (200m Balaka side) INHABITATION Main industry of Small-scale farming inhabitant Farm land, inhabitation, Livestock's grazing area LAND USE NP/Wildlife Reserve & Nonexistent Forest Upsteram(Dec.17,2004) Church(110m Salima side), Brick yard(90m Salima side), Bus stop(200m Balaka SOCIAL INFRASTRUCTURE Maize side) Cassava VULNERABLE SOCIAL GROUPS Nonexistent WATER RIGHTS Nonexistent FISHERIES RIGHTS Nonexistent LOCAL CONFLICT Nonexistent 200m CULTURAL HERITAGE Nonexistent Bus stop INFECTIOUS DISEASES HIV/AIDS Interview with administration in Salima District Hospital (see interview result) OTHERS (Disaster) Road pavement, road embankment and river edge were eroded and scoured by flood 15 Inhabitants and 1kiosk in 2003. (2houses in ROW, 13 houses out ROW) BALAKA

アンゴニカルバート チェックシート (下流側)

SURVEY DATE	:29 Dec. 2004, 6 Jan. 2005	LOCATION NAME	ANGONI CULVERT		LAT:S14°36'58.3" LNG:E34°44'20.9" ALT:638m	
WEATHER	:SHOWER/CLOUDY	SURVEY AREA	600*200m=12ha (included river area, 300m 100m each side from center of existing road)		n each side from center of bailey bridge,	
SURVEYOR	:HIGA/MAKWINJA	SURVEY AREA			d)	
SKETCH	:HIGA (no scale)		CONDITION OF	EACH	DOWN STREAM	
	50m Legend		ENVIRONMENTAL ITEM			
		Existing Bridge Existing Road Facilities, Inhabit. Water usage point	AIR POLLUTION		No relation	
			WATER POLL UTION	River Dimension	See Topographic map	
	50m			Flow	No flow (puddles in river , visual survey, Dec.17,2004)	
	20 Inhabitants 200m			Turbidty,PH, COD		
			SOIL POLLUTION WASTE TRAFFIC ACCIDENT AND SECURITY SITUATION		No relation	
Salima					Quarry (Sharape, +10km distance), Borrow and Gravel Pit (Kalungama, +5km dista	
	Maize V	339°			Interview with Salima traffic police station (see interview result)	
	Cassava V		WATER USAGE		Washing, Water place for livestock	
		H I		Animal Diversity	Interview with NRA Environmental Specialist and local inhabitant	
			BIODIVERSITY	Vegetation	Maize, Cassava, Banana, Papaya, Sugar cane	
Dow		teram(Dec. 17, 2004) Railwa	BIODIVERSITI	Endangered Species	Nonexistent	
			INHABITATION	In the right of the way	10 (200m Balaka side)	
		180m		Out of ROW	35 (200m Salima and Balaka side)	
		180m		Main industry of inhabitant	Small-scale farming, Kiosk, Trading	
20m			LAND USE		Farm land, inhabitation, Livestock's grazing area	
	50m Grave	For washing, livestock		NP/Wildlife Reserve & Forest	Nonexistent	
Som Maize V V Cassava V V		~	SOCIAL INFRASTRUCTURE		Bus stop, Meeting place, Kindergarten (250m Balaka side), Trading center, Kiosk(mini-bar & cafe)	
			VULNERABLE SOCIAL GROUPS		Nonexistent	
		0	WATER RIGHTS		Nonexistent	
	The state of the s	N N	FISHERIES RIGHTS		Nonexistent	
			LOCAL CONFLICT		Nonexistent	
	200m	4	CULTURAL HERITAGE		Nonexistent	
THE REAL PROPERTY.		Trading center	INFECTIOUS DISEASES HIV/AIDS		Interview with administration in Salima District Hospital (see interview result)	
Bus sto	Bus stop 25 Inhabitants, 4kiosks and 2 meeting place under the tree(10 houses in ROW, 15 houses out ROW)		OTHERS (Disaster)		Road pavement, road embankment and river edge were eroded and scoured by fin 2003.	