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ANNEX 1-DETAILED BUDGET TABLE FOR TANZANIA NATIONAL AVIAN INFLUENZA STRATEGIC PLAN

Code	ACTIVITY	Unit	Unit Cost	Quantity			Estimated Cost in USD			Total
				YR 1	YR2	YR 3	YR 1	YR 2	YR 3	
Output 1:- Capacity for early detection and reporting improved										
1.1.0	Surveillance of Avian Influenza in Human, Livestock & Wildlife improved									
1.1.1	Training to medical staff	Sessions	25,200	4	2	2	100,800	50,400	50,400	201,600
1.1.2	Training for Veterinary Staff	Sessions	25,200	8	5	5	201,600	126,000	126,000	453,600
1.1.3	Training for Wildlife Staff	Sessions	25,200	2	2	2	50,400	50,400	50,400	151,200
1.1.4	Surveillance equipment & reagents to Hospitals	set	8,000	4	4	4	32,000	32,000	32,000	96,000
1.1.5	Surveillance Equipment to veterinary staff	set	13,000	12	0	0	156,000	0	0	156,000
1.1.6	Surveillance Equipment to wildlife staff	set	3,000	4	0	0	12,000	0	0	12,000
1.1.7	Operating Costs-Human AI Surveillance	Is	100,000	1	1	1	100,000	100,000	100,000	300,000
1.1.8	Operating Costs-Livestock AI Surveillance	Is	170,000	1	1	1	170,000	170,000	170,000	510,000
1.1.9	Operating Costs-Wildlife AI Surveillance	Is	53,000	1	1	1	53,000	53,000	53,000	159,000
1.1.11	Vehicle Operating Costs	Is	430,000	1	1	1	430,000	430,000	430,000	1,290,000
1.1.12	Vehicle Maintenance Cost	Is	172,000	1	1	1	172,000	172,000	172,000	516,000
1.1.13	Provide GPS Units	Units	1,086	50	50	0	54,300	54,300	0	108,600
1.1.17	Provide protective gear	Set	1,800	100	50	50	180,000	90,000	90,000	360,000
1.1.18	Surveillance Laboratory protective gear	set	960	65	65	65	62,400	62,400	62,400	187,200
1.1.19	Hospital protective gear	set	700	40	40	40	28,000	28,000	28,000	84,000
1.1.20	Field Protective Gear	set	120	112	112	112	13,440	13,440	13,440	40,320
	Subtotal for improvement of surveillance						1,815,940	1,431,940	1,377,640	4,625,520
1.2.0	Lab diagnostic capacity improved									
1.2.1.0	Diagnostic capacity at ADRI improved									
1.2.1.1	Specialized Training for ADRI staff	Number	14,500	12			174,000	0	0	174,000
1.2.1.2	Specialized equipment (PCR system at ADRI)	set	250,000	1	1	0	250,000	250,000	0	500,000

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1.2.1.4	Renovation of National Reference Lab	Is	150,000	2	2	1	300,000	300,000	150,000	750,000	
1.2.1.5	Cost of submission of samples to world reference labs	Samples	300	100	100	100	30,000	30,000	30,000	90,000	
1.2.2.0	Investigation Capacity at VICs improved										
1.2.2.1	Training of VIC staff	Sessions	25,000	1	1	1	25,000	25,000	25,000	75,000	
1.2.2.2	Procure Animal Antigen Kit	Kits	3,000	7	7	7	21,000	21,000	21,000	63,000	
1.2.2.3	Sample Collection and Submission Gear (liquid nitrogen tanks & other cold chain)	Set	20,000	3	0	3	60,000	0	60,000	120,000	
1.2.2.4	Sample Transportation Costs to National Referral Laboratories	Samples	25	3000	3000	3000	75,000	75,000	75,000	225,000	
1.2.2.5	Tissue Sample Collection	Samples	5	3000	3500	3800	15,000	17,500	19,000	51,500	
1.2.2.6	Serum Sample Collection	Samples	5	3000	3500	3800	15,000	17,500	19,000	51,500	
1.2.2.7	Cloacal & choanal Samples	Samples	5	3000	3500	3800	15,000	17,500	19,000	51,500	
1.2.2.8	Provision of test kits and reagents	Kits	5,000	8	8	8	40,000	40,000	40,000	120,000	
1.2.2.9	VIC Vehicle Operating Costs	Vehicles	7,000	7	7	7	49,000	49,000	49,000	147,000	
1.2.2.10	Communication costs for 7 VICs	Ls	1,400	7	7	7	9,800	9,800	9,800	29,400	
	Subtotal for Laboratory Diagnostic Capacity						1,078,800	852,300	516,800	2,447,900	
2.1.0	Output 2.Capacity to Contain AI at source is established						0	0	0	0	
2.1.1	Training field staff on law enforcement	Sessions	25000	2	2	2	50,000	50,000	50,000	150,000	
2.1.2	Training DVO on movement management	Sessions	25000	2	2	2	50,000	50,000	50,000	150,000	
2.1.3	Training field staff on supervision of destruction or disposal of infected animals	Sessions	25000	2	2	2	50,000	50,000	50,000	150,000	
2.1.4	Training on disinfection and fumigation of infected premises	Sessions	25000	4	4	4	100,000	100,000	100,000	300,000	
2.1.5	Procurement of 4WD for Districts	Number	60000	20	10	10	1,200,000	600,000	600,000	2,400,000	
2.1.6	Collection OF specimens for laboratory testing,	Specimen	5	1500	1500	1500	7,500	7,500	7,500	22,500	
2.1.7	Training wildlife staff on disposal of dead birds	Sessions	25000	2	2	2	50,000	50,000	50,000	150,000	

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2.1.8	District Coordination Meetings	Meetings	1650	60	70	80	99,000	115,500	132,000	346,500
2.1.9	Field operations for outbreak containment	operations	30000	10	10	10	300,000	300,000	300,000	900,000
2.1.10	Compensation of Livestock farmers and traders	each	3	180000	18000	180000	540,000	540,000	540,000	1,620,000
	Subtotal fro containing the problem at source						2,446,500	1,863,000	1,879,500	6,189,000
3.0.0	Output 3: Opportunities for Human infection are Reduced						0	0	0	0
3.1.1	Sensitization of border staff	trips	5500	4	4	4	22,000	22,000	22,000	66,000
3.1.2	Training of border medical staff	sessions	25000	4	4	4	100,000	100,000	100,000	300,000
3.1.3	Production of leaflets and brochures for supply to travelers.	lumpsum	50,000	1	1	1	50,000	50,000	50,000	150,000
3.1.4	Procurement of 4WD vehicles to 40 Districts	vehicles	60000	10	20	10	600,000	1,200,000	600,000	2,400,000
3.1.5	Production of clinical management guidelines	Guidelines	10000	4	4	4	40,000	40,000	40,000	120,000
3.1.6	Procure Disinfection Gear (Equipment & Chemicals)	lumpsum	50000	1	1	1	50,000	50,000	50,000	150,000
3.1.7	Stockpiling Emergency Vaccine and antiviral drugs for humans	lumpsum	130,000	1	0	0	130,000	0	0	130,000
3.1.8	Mobilization of Support Agencies	lumpsum	10,000	1	1	1	10,000	10,000	10,000	30,000
3.1.9	Designation & Renovation of AI Special hospital wards in high risk areas	Wards	10,000	10	20	10	100,000	200,000	100,000	3,346,000
3.1.10	Purchase of protective gears for clinical experts	sets	1800	50	50	50	90,000	90,000	90,000	270,000
	Subtotal For Reducing opportunities for human infection						1,192,000	1,762,000	1,062,000	6,962,000
4.0.0	Output 4: Increase Public Awareness on AI									
4.1.1	Mass communication activities									270,000
4.1.2	Production of leaflets	Leaflets	0.5	330,000	330,000	330,000	165,000	165,000	165,000	495,000
4.1.3	Production of Posters	Posters	2	15,000	15,000	15,000	30,000	30,000	30,000	90,000
4.1.4	Production of Training Packages	Packages	10	120	120	120	1,200	1,200	1,200	3,600
4.1.5	TV (episodes)	Episodes	700	12	12	12	8,400	8,400	8,400	25,200
4.1.6	Production of radio	Program	650	24	24	24	15,600	15,600	15,600	46,800

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	programmes	s								
4.1.7	Production of materials for mass media	Releases	200	10	10	10	2,000	2,000	2,000	6,000
4.1.8	Increase Frontlines Awareness in High Risk Areas						0	0	0	0
4.1.9	Training Civil Society Organizations	Sessions	25000	3	3	3	75,000	75,000	75,000	225,000
4.1.10	Training LGA leaders	Sessions	50000	5	5	5	250,000	250,000	250,000	750,000
4.1.11	Organization of Campaign Meetings	Meetings	900	40	40	40	36,000	36,000	36,000	108,000
4.1.12	Training of media staff	Sessions	10000	10	5	5	100,000	50,000	50,000	200,000
4.1.13	Training of Technical staff in Villages	Sessions	1500	120	120	120	683,200	633,200	633,200	1,949,600
	Subtotal AWARENESS CREATION						1,366,400	1,044,200	1,044,200	3,232,600
5.0.0	Output 5: Improved understanding of AI epidemiology									
5.1.1	Descriptive studies in birds, swine, wild pigs and humans	Number	100000	1	1	1	100,000	100,000	100,000	300,000
5.1.2	Identify risk factors associated with transmission Avian Influenza	Number	100000	1	1	1	100,000	100,000	100,000	300,000
5.1.3	Establish AI vaccination programme .	Number	100000	1	1	1	100,000	100,000	100,000	300,000
5.1.4	Monitor antiviral drug use, adverse effects & resistance	Number	100000	1	1	1	100,000	100,000	100,000	300,000
	Subtotal for: Improved understanding of AI epidemiology						400,000	400,000	400,000	1,200,000
6.0.0	Output 6: Emergency Management and Coordination									
6.1.1	Technical Group Operations									
6.1.2	Review, preparation and strategy meetings	Meetings	3000	24	24	24	72,000	72,000	72,000	216,000
6.1.3	Preparedness plan, proposal for donor funding, Input to preparedness plan	Plans	6500	1	0	1	6,500	0	6,500	13,000
6.1.4	Emergency response and field investigation missions	Trips	2300	4	4	4	9,200	9,200	9,200	27,600
6.1.5	Communication Costs (telephone, air time)	Ls	9600	1	1	1	9,600	9,600	9,600	28,800
6.1.6	National Task Force Operations						0	0	0	0
6.1.7	Meetings for Approval of implementation plans, Progress	Meetings	9452	4	4	4	37,808	37,808	37,808	113,424

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	monitoring and evaluation									
6.1.8	Secretarial Services to Task Force	Meetings	1181	8	8	8	9,448	9,448	9,448	28,344
6.1.9	Procurement of 4WD vehicles for Command centre	vehicles	70000	3	0	0	210,000	0	0	210,000
	Sub-Total Technical Experts & Task Group Operations						354,556	138,056	144,556	637,168
	Total for emergency Preparedness and response plan						8,654,196	7,491,496	6,424,696	25,294,188

ANNEX 2-DETAILED BUDGET TABLE FOR TANZANIA NATIONAL AVIAN INFLUENZA BY SECTOR ALLOCATION

Code	ACTIVITY	Unit	Unit Cost	Quantities			Estimated Cost (USD)			
				Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Total
Medical Component										
Output 1:- Capacity for early detection and reporting improved										
1.1.0	Surveillance of Avian Influenza in Humans						0	0	0	-
1.1.1	Training to medical staff	Sessions	25200	4	2	2	100800	50400	50400	201,600
1.1.4	Surveillance equipment & reagents to Hospitals	set	8000	4	4	4	32000	32000	32000	96,000
1.1.7	Operating Costs	Lumpsum	100000	1	1	1	100000	100000	100000	300,000
1.1.10	Vehicle Operating Costs	Lumpsum	430000	0.25	0.25	0.25	107500	107500	107500	322,500
1.1.11	Vehicle Maintenance Cost	Lumpsum	172000	0.25	0.25	0.25	43000	43000	43000	129,000
1.1.12	Provide GPS Units	Units	1086	12	12	0	13032	13032	0	26,064
1.1.13	Provide protective gear	Set	1800	25	13	13	45000	23400	23400	91,800
1.1.15	Hospital protective gear	set	700	40	40	40	28000	28000	28000	84,000
	Subtotal for improvement of surveillance						469,332	397,332	384,300	1,250,964
Output 3: Opportunities for Human infection are Reduced										
3.1.1	Sensitization of border staff	trips	5500	4	4	4	22000	22000	22000	66,000.
3.1.2	Training of border medical staff	sessions	25000	4	4	4	100000	100000	100000	300,000.
3.1.3	Production of leaflets and brochures	lumpsum	50000	1	1	1	50000	50000	50000	150,000.
3.1.4	Procurement of 4WD vehicles to 40 Districts	vehicles	60000	10	20	10	600000	1200000	600000	2,400,000.
3.1.5	Production of clinical management guidelines	Guidelines	10000	4	4	4	40000	40000	40000	120,000.
3.1.6	Procure Disinfection Gear (Equipment & Chemicals)	lumpsum	50000	1	1	1	50000	50000	50000	150,000.
3.1.7	Stockpiling Emergency Vaccine and antiviral drugs for humans	lumpsum	130000	1	0	0	130000	0	0	130,000.
3.1.8	Mobilization of Support Agencies	lumpsum	10000	1	1	1	10000	10000	10000	30,000.
3.1.9	Designation & Renovation of AI Special hospital wards in high risk areas	Wards	10000	10	20	10	100000	200000	100000	400,000.
3.1.10	Purchase of protective gears for clinical experts	sets	1800	50	50	50	90000	90000	90000	270,000
	Subtotal For Reducing opportunities for human infection						1192000	1762000	1062000	4,016,000

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	Total for Medical Component						1,661,332	2,159,332	1,446,300	5,266,964
Veterinary Component										
Output 1:- Capacity for early detection and reporting improved										
1.1.0	Surveillance of Avian Influenza in Livestock						0	0		
1.1.2	Training for Veterinary Staff	Sessions	25200	8	5	5	201600	126000	126000	453,600.
1.1.5	Surveillance Equipment to veterinary staff	set	13000	12	0	0	156000	0	0	156,000.
1.1.8	Operating Costs-Livestock AI Surveillance	Lumpsum	170000	1	1	1	170000	170000	170000	510,000.
1.1.10	Vehicle Operating Costs	Lumpsum	430000	0.5	0.5	0.5	215000	215000	215000	645,000.
1.1.11	Vehicle Maintenance Cost	Lumpsum	172000	0.5	0.5	0.5	86000	86000	86000	258,000.
1.1.12	Provide GPS Units	Units	1086	24	24	0	26064	26064	0	52,128.
1.1.13	Provide protective gear	Set	1800	50	26	26	90000	46800	46800	183,600.
1.1.14	Surveillance Laboratory protective gear	set	960	34	34	34	32640	32640	32640	97,920.
1.1.16	Field Protective Gear	set	120	84	84	84	10080	10080	10080	30,240.
	Subtotal for improvement of surveillance						987384	712584	686520	2386488
1.2.0	Lab diagnostic capacity improved									
1.2.1.0	Diagnostic capacity at ADRI improved									
1.2.1.1	Specialized Training for ADRI staff	Number	14500	12	0	0	174000	0	0	174,000.
1.2.1.2	Specialized equipment (PCR system at ADRI)	set	250000	1	1	0	250000	250000	0	500,000.
1.2.1.3	Renovation of National Reference Lab	Lumpsum	150000	2	2	1	300000	300000	150000	750,000.
1.2.1.4	Cost of submission of samples to world reference labs	Samples	300	100	100	100	30000	30000	30000	90,000.
1.2.2.0	Investigation Capacity at VICs improved									
1.2.2.1	Training of VIC staff	Sessions	25000	1	1	1	25000	25000	25000	75,000.
1.2.2.2	Procure Animal Antigen Kit	Kits	3000	7	7	7	21000	21000	21000	63,000.
1.2.2.3	Sample Collection and Submission Gear (liquid nitrogen tanks & other cold chain)	Set	20000	3	0	3	60000	0	60000	120,000.
1.2.2.4	Sample Transportation Costs to National Referral Laboratories	Samples	25	2500	2500	2500	62500	62500	62500	187,500.
1.2.2.5	Tissue Sample Collection	Samples	5	3000	3500	3800	15000	17500	19000	51,500.
1.2.2.6	Serum Sample Collection	Samples	5	3000	3500	3800	15000	17500	19000	51,500.

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1.2.2.7	Cloacal & choanal Samples	Samples	5	3000	3500	3800	15000	17500	19000	51,500.
1.2.2.8	Provision of test kits and reagents	Kits	5000	8	8	8	40000	40000	40000	120,000.
1.2.2.9	VIC Vehicle Operating Costs	Vehicles	7000	7	7	7	49000	49000	49000	147,000
1.2.2.10	Communication costs for 7 VICs	Lumpsum	1400	7	7	7	9800	9800	9800	29,400
	Subtotal for Laboratory Diagnostic Capacity		0	0	0	0	1066300	839800	504300	2410400
2.1.0	Output 2.Capacity to Contain AI at source is established		0	0	0	0	0	0	0	
2.1.1	Training field staff on law enforcement	Sessions	25000	2	2	2	50000	50000	50000	150,000
2.1.2	Training DVO on movement management	Sessions	25000	2	2	2	50000	50000	50000	150,000
2.1.3	Training field staff on supervision of destruction or disposal of infected animals	Sessions	25000	2	2	2	50000	50000	50000	150,000
2.1.4	Training on disinfection and fumigation of infected premises	Sessions	25000	4	4	4	100000	100000	100000	300,000
2.1.5	Procurement of 4WD for Districts	Number	60000	20	10	10	1200000	600000	600000	2,400,000
2.1.6	Collection OF specimens for laboratory testing,	Specimen	5	1500	1500	1500	7500	7500	7500	22,500
2.1.8	District Coordination Meetings	Meetings	1650	60	70	80	99000	115500	132000	346,500
2.1.9	Field operations for outbreak containment	operations	30000	8	8	8	240000	240000	240000	720,000
2.1.10	Compensation of Livestock farmers and traders	each	3	180000	180000	180000	540000	540000	540000	1,620,000
0	Subtotal fro containing the problem at source		0	0	0	0	2336500	1753000	1769500	5859000
	Total for Veterinary Component						4,390,184	3,305,384	2,960,320	10,655,888
	Wildlife Component									
	Output 1:- Capacity for early detection and reporting improved									
1.1.0	Surveillance of Avian Influenza in Wildlife									
1.1.3	Training for Wildlife Staff	Sessions	25200	2	2	2	50400	50400	50400	151,200
1.1.6	Surveillance Equipment to wildlife staff	set	3000	4	0	0	12000	0	0	12,000
1.1.9	Operating Costs-Wildlife AI Surveillance	Lumpsum	53000	1	1	1	53000	53000	53000	159,000
1.1.10	Vehicle Operating Costs	Lumpsum	430000	0.25	0.25	0.25	107500	107500	107500	322,500
1.1.11	Vehicle Maintenance Cost	Lumpsum	172000	0.25	0.25	0.25	43000	43000	43000	129,000

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1.1.12	Provide GPS Units	Units	1086	12	12	0	13032	13032	0	26,064
1.1.13	Provide protective gear	Set	1800	25	13	13	45000	23400	23400	91,800
1.1.14	Surveillance Laboratory protective gear	set	960	34	34	34	32640	32640	32640	97,920
1.1.16	Field Protective Gear	set	120	28	28	28	3360	3360	3360	10,080
0	Subtotal for improvement of surveillance		0	0	0	0	359932	326332	313300	999,564
1.2.0	Lab diagnostic capacity improved		0	0	0	0	0	0	0	-
1.2.2.4	Sample Transportation Costs to National Referral Laboratories	Samples	25	500	500	500	12500	12500	12500	37,500
0	Subtotal for Laboratory Diagnostic Capacity		0	0	0	0	12500	12500	12500	37,500
2.1.0	Output 2.Capacity to Contain AI at source is established		0	0	0	0	0	0	0	-
2.1.7	Training wildlife staff on disposal of dead birds	Sessions	25000	2	2	2	50000	50000	50000	150,000
2.1.9	Field operations for outbreak containment	operations	30000	2	2	2	60000	60000	60000	180,000
0	Subtotal fro containing the problem at source						110000	110000	110000	330000
	Total for Wildlife Component						469,932	436,332	423,300	1,329,564
Communication Component										
Output 4: Increase Public Awareness on AI						0				
4.1.1	Mass communication activities									
4.1.2	Production of leaflets	Leaflets	0.5	330000	330000	330000	165000	165000	165000	495,000
4.1.3	Production of Posters	Posters	2	15000	15000	15000	30000	30000	30000	90,000
4.1.4	Production of Training Packages	Packages	10	120	120	120	1200	1200	1200	3,600
4.1.5	TV (episodes)	Episodes	700	12	12	12	8400	8400	8400	25,200
4.1.6	Production of radio programmes	Programs	650	24	24	24	15600	15600	15600	46,800
4.1.7	Production of materials for mass media	Releases	200	10	10	10	2000	2000	2000	6,000
4.1.8	Increase Frontlines Awareness in High Risk Areas		0	0	0	0	0	0	0	-
4.1.9	Training Civil Society Organizations	Sessions	25000	3	3	3	75000	75000	75000	225,000
4.1.10	Training LGA leaders	Sessions	50000	5	5	5	250000	250000	250000	750,000
4.1.11	Organization of Campaign Meetings	Meetings	900	40	40	40	36000	36000	36000	108,000
4.1.12	Training of media staff	Sessions	10000	10	5	5	100000	50000	50000	200,000

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4.1.13	Training of Technical staff in Villages	Sessions	1500	120	120	120	180000	180000	180000	540,000	
	Total for Communication Component						0	863200	813200	813200	2,489,600
Research Component							0	0	0	-	
Output 5: Improved understanding of AI epidemiology						0	0	0	0	-	
5.1.1	Descriptive studies in birds, swine, wild pigs and humans	Number	100000	1	1	1	100000	100000	100000	300,000	
5.1.2	Identify risk factors associated with transmission Avian Influenza	Number	100000	1	1	1	100000	100000	100000	300,000	
5.1.3	Establish AI vaccination programme .	Number	100000	1	1	1	100000	100000	100000	300,000	
5.1.4	Monitor antiviral drug use, adverse effects & resistance	Number	100000	1	1	1	100000	100000	100000	300,000	
	Subtotal for: Improved understanding of AI epidemiology	0	0	0	0	0	400000	400000	400000	1200000	
Coordination Component											
Output 6: Emergency Management and Coordination											
6.1.1	Technical Group Operations										
6.1.2	Review, preparation and strategy meetings	Meetings	3000	24	24	24	72000	72000	72000	216,000	
6.1.3	Preparedness plan, proposal for donor funding, Input to preparedness plan	Plans	6500	1	0	1	6500	0	6500	13,000	
6.1.4	Emergency response and field investigation missions	Trips	2300	4	4	4	9200	9200	9200	27,600	
6.1.5	Communication Costs (telephone, air time)	Lumpsum	9600	1	1	1	9600	9600	9600	28,800	
6.1.6	National Task Force Operations	0	0	0	0	0	0	0	0	-	
6.1.7	Approval of implementation plans, monitoring and evaluation	Meetings	9452	4	4	4	37808	37808	37808	113,424.	
6.1.8	Secretarial Services to Task Force	Meetings	1181	8	8	8	9448	9448	9448	28,344	
6.1.9	Procurement of 4WD vehicles for Command centre	vehicles	70000	3	0	0	210000	0	0	210,000	
	Total for Emergency Management and coordination						0	354556	138056	144556	637,168
	Total fo emergency Preparedness and response plan							16,303,408	14,529,608.	12,400,352	43,233,368

ANNEX 3 –LOGICAL FRAMEWORK

Narrative Summary	Objectively Verifiable Indicator	Means of Verification	Assumptions
Overall Goal Contribute towards poverty alleviation and sustenance of improved livelihood through protecting human health and economic welfare from the effects of emerging diseases			
Overall Objective: Introduction and spread of HPAI in Tanzania is Prevented	HPAI does not become endemic in Tanzania	OIE reports	Early Detection and Rapid Response Strategic Plan adopted and operational
Specific Objectives Short Term Preparedness Capacity for AI Outbreak in place by December 2006	Strategic Plan Document developed and adopted by March 2006. Emergency Preparedness Capacity Building Activities and Funding implemented by December 2007	Sector (MOH;MLD & MNRT) Reports & Documents Emergency Fund Facility Account Number or Government Decree ensuring resources to disease emergencies	Formulation Technical Staff available Treasury accepts and endorses the opening and operation of the fund
Medium Term AI Outbreaks contained and spreading delayed	Contingency Plan Funding secured by Dec 2006		Adopted of the Contingency Plan by the Government and acceptance of Financing Agencies
Long Term Disaster Recovery and Reconstruction Capacity strengthened	Prevention and Mitigation Measures for AI Outbreak incorporated in Annual Development Plan starting from July 2006		
Project Outputs:			
1.0 Capacity for early detection in AI Improved	There is capacity to detect and report the disease within 24 hours by June 2007	Epidemiology-surveillance and Laboratory Evaluation Reports	Tests for rapid diagnosis are available and reference labs are providing prompt response
2.0-Capacity to promptly respond to contain the problem at source strengthened	Score for emergency preparedness is above average by 2008	International Evaluation Reports	Appropriate control technologies are available to Tanzania
3.0 There is heightened alertness of Tanzanian Public against HPAI	80% Tanzanian Public is aware of HPAI	Survey reports	General public takes the right precautions against AI
4.0 Opportunities for	Outbreak Management	MOH Document	Adoption of the contingency

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Human infection reduced	Guidelines in place by Dec 2006 Emergency Requirements for AI Outbreak Containment procured and stockpiled by December 2007 Human Resource Technical Capacity strengthened by June 2008	Stock Verification Report Training Reports	by the government and funding
5,0 Understanding of AI epidemiology improved.	Epidemiology report of AI is published by 2008	Reprints of publications	Research results are used in AI prevention/containment
6.0 Disaster Crisis Management Capacity and Coordination Improved	Emergency Preparedness & Response Plan Operations well managed and collaborates with the National Disaster Management Unit by July 2006	Performance reports Quarter and Annual Physical & Financial Reports	Sector Ministries designate and incorporate Disaster Focal Point Officers in their institutional structure A competent, self driven, innovative and motivated Programme Coordinator is recruited.
Output	Key Result Area	Activities	Responsibility
Output 1: Capacity for early detection in Improved	Surveillance of Avian Influenza in Human, Livestock & Wildlife improved	Training of medical staff	MOH
		Training of Veterinary Staff	MLD
		Training of Wildlife Staff	MNRT
		Procurement of surveillance equipment & reagents to Hospitals	MOH
		Procurement of Surveillance Equipment to veterinary	MLD
		Procurement of Surveillance Equipment to wildlife	MNRT
		Operating Costs-Human AI Surveillance	MOH
		Operating Costs-Livestock AI Surveillance	MLD
		Operating Costs-Wildlife AI Surveillance	MNRT
		Vehicle Operating Costs	PC
		Vehicle Maintenance Cost	PC
		Procurement of GPS Units to map outbreak areas	PC
		Procure Laboratory protective gear	MLD
		Procure Hospital protective gear	MOH
		Procure Field Protective Gear	MLD
	Lab Diagnostic Capacity Improved	Diagnostic capacity at ADRI improved	MLD
		Specialized Training for ADRI staff	MLD
Specialized equipment (PCR system at ADRI)		MLD	

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		Renovation of National Reference Lab	MLD
		Cost of submission of samples to world reference labs	MLD
		Investigation Capacity at VICs improved	MLD
		Training of VIC staff	MLD
		Procure Animal Antigen Kit	MLD
		Sample Collection and Submission Gear (liquid nitrogen tanks & other cold chain)	MLD
		Sample Transportation Costs to National Referral Laboratories	MLD
		Tissue Sample Collection	MLD
		Serum Sample Collection	MLD
		Cloacal & choanal Samples	MLD
		Provision of test kits and reagents	MLD
		VIC Vehicle Operating Costs	MLD
		Communication costs for 7 VICs	MLD
Output 2: Capacity to Contain AI at source is established	Field Teams Training	Training field staff on law enforcement	PC
		Training DVO on movement management	MOH
		Training field staff on supervision of destruction or disposal of infected animals	MLD
		Training on disinfection and fumigation of infected premises	MOH
		Training wildlife staff on disposal of dead birds	MNRT
	Field Operations & Logistical Support	Procurement of 4WD for Districts	MLD
		Collection of specimens for laboratory testing,	MLD
		District Coordination Meetings	MLD
		Field operations for outbreak containment	MLD
		Compensation of Livestock farmers and traders	MLD
Output 3: Opportunities for Human infection are Reduced	Sensitization of border staff	Training of border medical staff	MOH
		Production of leaflets and brochures for supply to travelers.	MOH
	Strengthening Case Management Capacity	Procurement of 4WD vehicles to 40 Districts	MOH
		Production of clinical management guidelines	MOH
		Procure Disinfection Gear (Equipment & Chemicals)	MOH
		Stockpiling Emergency Vaccine and antiviral drugs for humans	MOH
		Mobilization of Support Agencies	PMO
		Designation & Renovation of AI Special hospital wards in high risk areas	MOH
		Purchase of protective gears for clinical experts	MOH

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Output 4: Increase Public Awareness on AI	Mass Communication Activities	Production of leaflets	PC
		Production of Posters	PC
		Production of Training Packages	PC
		TV (episodes)	PC
		Production of radio programmes	PC
		Production of materials for mass media	PC
	Increase Frontlines Awareness in High Risk Areas	Training Civil Society Organizations	PC
		Training LGA leaders	PC
		Organization of Campaign Meetings	PC
		Training of media staff	PC
Training of Technical staff in Villages		PC	
Output 5: Improved understanding of AI epidemiology	Research Studies to improve the understanding of AI epidemiology and eradication measures conducted	Descriptive studies in birds, swine, wild pigs and humans	ADRI NIMR
		Identify risk factors associated with transmission Avian Influenza	ADRI NIMR
		Establish AI vaccination programme.	ADRI NIMR
		Monitor antiviral drug use, adverse effects & resistance	ADRI NIMR
Output 6: Emergency Management and Coordination	Technical ,Task Group and Command Posts Operations	Review, preparation and strategy meetings	PC
		Preparedness plan, proposal for donor funding, Input to preparedness plan	PC
		Emergency response and field investigation missions	PC
		Communication Costs (telephone, air time)	PC
		National Task Force Operations	PC
		Meetings for Approval of implementation plans, Progress monitoring and evaluation	PC
		Secretarial Services to Task Force	PC
		Procurement of 4WD vehicles for Command centre	PC

ANNEX 4: STRENGTH, WEAKNESS, THREATS AND OPPORTUNITY (SWOT) ANALYSIS

Area	Description
Strength	Stable Government Well elaborated Government Institutional Structure from national village level Existing Laboratory Infrastructures (Human, Wildlife and Veterinary) Trained Manpower to Guide Implementation (Human, Wildlife and Veterinary) National Commitment and endeavors to avert AI Pandemic Team Work Spirit between Ministries Disaster Risk Reduction Mechanism (TANDREC, Regional and District Disaster Committee)
Weakness	Poor financial endowment (Developing Country) Inadequate Surveillance Capacity and Capability Inadequate Laboratory Diagnostic Capacity Inadequate Public Education and Awareness Lack of single Chain of Command Inadequate Information, Education and Communication Channels Inadequate Hospital facilities (wards & equipments) to handle AI emergencies Inadequate Hospital Staff and resources to handle AI emergencies Inadequate Training on AI
Threats	High risk of Avian Influenza introduction and eventual spreading Presence of equally demanding emergencies like Drought/Famine; HIV-AIDs and other Epidemics/Epizootics
Opportunities	Global Commitment and endeavour to avert AI Pandemic Poverty Reduction Strategies and Millennium Development Goal Commitment International Financing Agency Pledges for Coordinated Multi-Donor Financing Adoption of Hyogo (Japan) 2005 International Framework for Disaster Risk Reduction Regional Programmes for the Control of AI (AU-IBAR;SADC & EAC)

ANNEX 5 STRATEGIC PLAN IMPLEMENTATION SCHEDULE

Key Result Area	Activities	Responsibility	Year 1	Year 2	Year 3
Surveillance of Avian Influenza in Human, Livestock & Wildlife improved	Training of medical staff	MOH	xxxx		
	Training of Veterinary Staff	MLD	xxxx		
	Training of Wildlife Staff	MNRT	xxxx		
	Procurement of surveillance equipment & reagents to Hospitals	MOH	xxxx		
	Procurement of Surveillance Equipment to veterinary	MLD	xxxx		
	Procurement of Surveillance Equipment to wildlife	MNRT	xxxx		
	Operating Costs-Human AI Surveillance	MOH	xxxx	xxxx	xxxx
	Operating Costs-Livestock AI Surveillance	MLD	xxxx	xxxx	xxxx
	Operating Costs-Wildlife AI Surveillance	MNRT	xxxx	xxxx	xxxx
	Vehicle Operating Costs	PC	xxxx	xxxx	xxxx
	Vehicle Maintenance Cost	PC	xxxx	xxxx	xxxx
	Procurement of GPS Units to map outbreak areas	PC	xxxx	xxxx	xxxx
	Procure Laboratory protective gear	MLD	xxxx	xxxx	xxxx
	Procure Hospital protective gear	MOH	xxxx	xxxx	xxxx
	Procure Field Protective Gear	MLD	xxxx	xxxx	xxxx
Lab Diagnostic Capacity Improved	Diagnostic capacity at ADRI improved	MLD	xxxx	xxxx	xxxx
	Specialized Training for ADRI staff	MLD	xxxx	xxxx	xxxx
	Specialized equipment (PCR system at ADRI)	MLD	xxxx	xxxx	xxxx
	Renovation of National Reference Lab	MLD	xxxx	xxxx	xxxx
	Cost of submission of samples to world reference labs	MLD	xxxx	xxxx	xxxx
	Investigation Capacity at VICs improved	MLD	xxxx	xxxx	xxxx
	Training of VIC staff	MLD	xxxx	xxxx	xxxx
	Procure Animal Antigen Kit	MLD	xxxx	xxxx	xxxx
	Sample Collection and Submission Gear (liquid nitrogen tanks & other cold chain)	MLD	xxxx	xxxx	xxxx
	Sample Transportation Costs to National Referral Laboratories	MLD	xxxx	xxxx	xxxx
	Tissue Sample Collection	MLD	xxxx	xxxx	xxxx
	Serum Sample Collection	MLD	xxxx	xxxx	xxxx
	Cloacal & choanal Samples	MLD	xxxx	xxxx	xxxx
	Provision of test kits and reagents	MLD	xxxx	xxxx	xxxx
	VIC Vehicle Operating Costs	MLD	xxxx	xxxx	xxxx
Communication costs for 7 VICs	MLD	xxxx	xxxx	xxxx	
Field Teams Training	Training field staff on law enforcement	PC	xxxx		
	Training DVO on movement management	MOH	xxxx		

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	Training field staff on supervision of destruction or disposal of infected animals	MLD	XXXX		
	Training on disinfection and fumigation of infected premises	MOH	XXXX		
	Training wildlife staff on disposal of dead birds	MNRT	XXXX		
Field Operations & Logistical Support	Procurement of 4WD for Districts	MLD	XXXX	XXXX	XXXX
	Collection of specimens for laboratory testing,	MLD	XXXX	XXXX	XXXX
	District Coordination Meetings	MLD	XXXX	XXXX	XXXX
	Field operations for outbreak containment	MLD	XXXX	XXXX	XXXX
	Compensation of Livestock farmers and traders	MLD	XXXX	XXXX	XXXX
Sensitization of border staff	Training of border medical staff	MOH	XXXX	XXXX	XXXX
	Production of leaflets and brochures for supply to travelers.	MOH	XXXX	XXXX	XXXX
Strengthening Case Management Capacity	Procurement of 4WD vehicles to 40 Districts	MOH	XXXX	XXXX	XXXX
	Production of clinical management guidelines	MOH	XXXX		
	Procure Disinfection Gear (Equipment & Chemicals)	MOH	XXXX	XXXX	XXXX
	Stockpiling Emergency Vaccine and antiviral drugs for humans	MOH	XXXX	XXXX	XXXX
	Mobilization of Support Agencies	PMO	XXXX	XXXX	XXXX
	Designation & Renovation of AI Special hospital wards in high risk areas	MOH		XXXX	XXXX
	Purchase of protective gears for clinical experts	MOH	XXXX	XXXX	XXXX
Mass Communication Activities	Production of leaflets	PC	XXXX	XXXX	XXXX
	Production of Posters	PC	XXXX	XXXX	XXXX
	Production of Training Packages	PC	XXXX	XXXX	XXXX
	TV (episodes)	PC	XXXX	XXXX	XXXX
	Production of radio programmes	PC	XXXX	XXXX	XXXX
	Production of materials for mass media	PC	XXXX	XXXX	XXXX
Increase Frontlines Awareness in High Risk Areas	Training Civil Society Organizations	PC	XXXX	XXXX	XXXX
	Training LGA leaders	PC	XXXX	XXXX	XXXX
	Organization of Campaign Meetings	PC	XXXX	XXXX	XXXX
	Training of media staff	PC	XXXX	XXXX	XXXX
	Training of Technical staff in Villages	PC	XXXX	XXXX	XXXX
Research Studies to improve the understanding of AI epidemiology and eradication measures conducted	Descriptive studies in birds, swine, wild pigs and humans	ADRI NIMR	XXXX	XXXX	XXXX
	Identify risk factors associated with transmission Avian Influenza	ADRI NIMR	XXXX	XXXX	XXXX
	Establish AI vaccination programme.	ADRI NIMR		XXXX	XXXX
	Monitor antiviral drug use, adverse effects & resistance	ADRI NIMR	XXXX	XXXX	XXXX

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Technical ,Task Group and Command Posts Operations	Review, preparation and strategy meetings	PC	xxxx	xxxx	xxxx
	Preparedness plan, proposal for donor funding, Input to preparedness plan	PC	xxxx	xxxx	xxxx
	Emergency response and field investigation missions	PC	xxxx	xxxx	xxxx
	Communication Costs (telephone, air time)	PC	xxxx	xxxx	xxxx
	National Task Force Operations	PC	xxxx	xxxx	xxxx
	Meetings for Approval of implementation plans, Progress monitoring and evaluation	PC	xxxx	xxxx	xxxx
	Secretarial Services to Task Force	PC	xxxx	xxxx	xxxx
	Procurement of 4WD vehicles for Command centre	PC	xxxx		

ANNEX 6 CONTIEGENCY PLAN ARRANGEMENTS

1.0 Legislation Arrangements-Animal Disease Act (Act.No.17) 2003

The Animal Disease Act (Act No 17) of 2003 provides powers for the control of outbreaks of AI. The Act provides for:-

- Slaughter of diseased poultry, poultry suspected of disease, poultry exposed to disease and poultry which the Inspector thinks should be slaughtered to prevent the spread of disease.
- Payment of compensation for birds that are slaughtered but are not diseased.
- Veterinary inspectors have powers to enter premises to ascertain whether disease anti-bodies exist, whether any animal is or was infected with disease and whether any causative agent of disease is present

2.0 Actions to be undertaken from suspicion

2.1 Actions in different levels of suspicion and confirmation of the disease

Level 0 – disease not suspected following veterinary inquiry; all restrictions on premises lifted and no further action is taken.

Level 1 – lesions and clinical disease not typical – but disease cannot be ruled out entirely on clinical grounds; suspect flock left alive and observed. **Actions**-samples submitted for laboratory diagnosis. And premises restrictions imposed.

Level 2 - lesions and clinical disease suggestive of a notifiable poultry disease but not entirely convincing. **Actions**-suspect flock left alive and observed, samples submitted for laboratory diagnosis. And premises restrictions imposed.

Level 3 - veterinary staff at premises under investigation and at HQ believe from examination on clinical grounds that disease exists. **Actions** -All poultry on the premises slaughtered on suspicion. Samples submitted for laboratory diagnosis, premises restrictions imposed. Area restrictions imposed. Contact Public Health Partners.

Level 4 - as at level 3 plus disease already confirmed in the country or substantial evidence that disease may have entered the country for example disease in imported animals originating from a region with confirmed notifiable poultry disease. Disease confirmed on clinical grounds only without awaiting laboratory results. **Actions**-Samples submitted for laboratory diagnosis. Premises restrictions imposed. Area restrictions imposed. All susceptible poultry on the premises slaughtered. Dangerous contacts traced and slaughtered depending on veterinary assessment.

2.2 Adopted Disease Control Strategy

The disease control strategy adopted will be consistent with the FAO/OIE/WHO recommended strategies and protocols. The main objective in tackling AI will be to

eradicate the disease as quickly as possible and in doing so the State Veterinary Authority will seek to select control strategies which:

- minimize the number of poultry which need to be slaughtered, either to control the disease or on welfare grounds, and which keeps poultry welfare problems to a minimum;
- cause the least possible disruption to the food, farming and tourism industries, to visitors to the countryside, and to rural communities and the wider economy;
- minimize damage to the environment and protecting public health; and

2.2.1 Temporary Control Measures – isolation from wild birds

In the event of HPAI being found in poultry, captive birds or wild birds all poultry owners would be required, wherever practicable, to move birds indoors as soon as possible. In cases where housing is not practicable, the keeper will be required to take all reasonable measures to minimize contact of poultry or captive birds with wild birds.

These measures would be invoked as a precautionary measure to avoid the spread of disease while an outbreak is investigated. As information about the source of the outbreak becomes available, the Government's strategy would be to lift or reduce the requirements as soon as possible. Subject to risk assessment, the Government may also invoke these measures in the event of an increased likelihood of disease introduction Tanzania

2.2.2 Temporary Control Measures – national movement ban

In the event of HPAI being found in poultry, the Government would require a short term national movement ban of all poultry and hatching eggs. The impacts of this national movement ban would be mitigated by the immediate introduction of licensed low risk movements. These measures would be invoked as a precautionary measure to avoid the spread of disease while an outbreak is being investigated; it is however expected to last for several days. A short term national movement ban may also be introduced in the event of HPAI being found in wild or captive birds, although this would not be automatic and would be subject to a veterinary risk assessment.

2.2.3 Premises Controls

The following measures will be applied on confirmation of AI-the first case will be confirmed by the DVS following laboratory diagnosis.

Premises where disease has been confirmed are known as infected premises (IPs); birds that have been exposed to infection through contact with the infected premises are known as dangerous contacts (DCs).

- All poultry on IPs will be culled. The DVS may also authorize the culling of flocks before confirmation of disease (known as slaughter on suspicion). This would require strong suspicion on clinical grounds of disease (Level 3) from veterinary staff on the ground and at HQ. The case will be stronger where there is a strong likelihood of disease spread if the birds remain alive.

- This is most likely to apply (a) on the first reported case in the country (b) on the case of a large outbreak, particularly where the suspect premises is in a previously unaffected area.
- • Dangerous contacts will be identified. Where the risk of exposure to virus is high, the poultry will be culled and laboratory samples taken. Where the risk of exposure is assessed as not high, restrictions on the premises will be in place for 21 days and regular veterinary visits undertaken.
- • Movement restrictions will apply to the IP or high risk DC until all birds have been culled, cleaning and disinfection has been completed and a veterinary inspector is satisfied that disease no longer exists on the premises
- • Restrictions are applied and lifted by serving the occupier of the premises with notices, which explain the restrictions imposed and any licensing provisions.

2.2.4 Area Controls

The Animal Disease Control Act No 17 of 2003 gives inspectors powers on suspicion of disease to impose movement controls on the suspected premises. However, once disease has been confirmed, area controls and restrictions are imposed by a Quarantine Declaration Notice.

The Quarantine Declaration Notice will specify the division of the Infected Area into protection and surveillance zones, the protection zone being a minimum radius of three kilometers from the IP and contained in a surveillance zone based on a minimum radius of ten kilometers from the IP.

2.2.4.1 Protection Zones

For at least 21 days the occupier of premises containing poultry shall ensure that ;- –

- any inspector who requires information as to the presence of poultry on those premises is supplied with such information as soon as practicable;
- any veterinary inspector who visits the premises to examine the poultry and take samples is given all necessary assistance and information;
- the poultry are kept in their living quarters or such other place where they can be isolated. Poultry keepers must plan how they would isolate their poultry from wild birds, should they fall within a protection zone;
- there is an appropriate means of disinfection at the entrance and exits of the premises;
- poultry and hatching eggs are not moved from the premises except under a license issued by a veterinary inspector:
- for the purpose of transport for immediate slaughter to a designated slaughterhouse, or in the case of day old chicks or ready-to-lay pullets, to premises within the surveillance zone on which there are no other poultry, or in the case of hatching eggs to a designated hatchery, subject to the eggs and their packing being disinfected before dispatch; and used litter and poultry manure are not removed or spread.
- no person shall move any poultry, eggs or carcasses within the zone, except that poultry may be transported without stopping through the zone on a major highway or railway

- no person shall hold any fair, market, show or other gathering of poultry or other birds.

2.2.4.2 Surveillance zones

- The following restrictions apply within the surveillance zone and will continue to apply for a period of at least 30 days after the preliminary cleansing and disinfection of the infected.

The occupier of premises must ensure that;—

- any inspector who requires information as to presence of poultry on those premises is supplied with such information as soon as practicable;
- poultry are not moved from the premises out of the zone except under a license issued by a veterinary inspector for the purpose of transport direct to a designated slaughterhouse outside the surveillance zone;
- hatching eggs are not moved from the premises out of the zone except under a license issued by a veterinary inspector for the purpose of transport direct to a designated hatchery and subject to the eggs and their packing being disinfected before dispatch; and used litter and poultry manure are not moved out of the zone.

No person shall:—

- move any poultry or hatching eggs into or within the zone except that poultry may be transported without stopping through the zone on a major highway or railway.
- hold any fair, market, show or other gathering of poultry or other birds.

The owner of any vehicle used to convey poultry, poultry carcasses, and poultry offal, poultry feathers or eggs originating in an infected area, before it is so used, as soon as practicable after each time it is so used and in any event before it is so used again, must effectively clean and disinfect it.

If AI were ever confirmed in any species of captive birds (other than in commercial species), or in racing pigeons, then slaughter, premises and area movement controls could be put into place if a veterinary risk assessment concluded that there was a risk of disease spreading to commercial poultry.

2.2.5 Surveillance Activities

There will be regular passive clinical and laboratory inspection and examination to look for evidence of AI in the (a) protection zone (b) surveillance zone. Active surveillance whereof a statistically significant number of poultry premises need to be inspected for signs of disease will be undertaken and samples collected for submission to laboratories. Premises with waterfowl will be subject to targeted surveillance because clinical disease is not always apparent in infected waterfowl.

2.2.5.1 Surveillance in Wild Bird Population

If there is epidemiological evidence to suggest that wild birds may have a role in the will involve collection of dead wild birds for laboratory investigation and screening of wild bird colonies by testing of faecal samples.

2.2.6 Vaccination

Vaccination against AI is a possible alternative to control the spread of the disease and the Animal Disease Act provides for imposition of a compulsory vaccination zone. However, in view of the following limitations, vaccination is not expected to be part of the Tanzanian Avian Influenza control strategy.

- The vaccines that are currently available to protect against AI disease are inactivated types and need to be delivered by injecting birds individually. It can take up to three weeks for birds to develop protective immunity and some poultry require two doses. The difficulties in delivering such a vaccine to a large number of birds are huge and render this approach impractical on a large scale.
- These vaccines protect against disease but will not protect birds from becoming infected and shedding virus. Although vaccination will reduce the amount of virus shed by birds this reduced amount may still be significant and could cause infection in other birds
- No AI vaccines currently have marketing authorization in Tanzania.

There may be a role for vaccination in the protection of zoological collections of rare breeds or endangered species.

3.0 Avian Influenza Outbreak Management

3.1 Health, Safety and Staff Welfare

- All persons who have had, or are likely to have had contact with infected birds will need to be provided with information as to how to protect themselves and their families from infection.
- Anyone with medical conditions that may increase the risk of infection with avian influenza, such as respiratory disease or a reduced Immuno-competence will be advised to stay away from poultry farms, avoid all contact with infected birds and seek appropriate medical advice.

To protect against infection, a hierarchy of control measures are needed which include:

- safe working practice in accordance with the risk assessment
- the wearing of all appropriate personal protective equipment by poultry workers/handlers/cullers/veterinarians
- safe disposal of used personal protective clothing and equipment
- use of the antiviral oseltamavir ('Tami flu') or other appropriate antiviral agent for the prescribed period by all who are considered to be at risk of infection and for whom antiviral therapy is not contraindicated
- vaccination with seasonal flu vaccine of all those considered to be at risk of infection and for whom vaccine is not contraindicated
- monitoring of health status of persons exposed to infected birds

- guidance to those at risk of infection on the personal hygiene measures to be taken to protect their health and to prevent the spread of infection
- In the event of an outbreak of HPAI in poultry, those exposed to infection should be offered seasonal flu vaccine as a precaution against the possibility of co-infection with human flu. Vaccine should be given as soon as possible, either before or at time of exposure, and at least within 48 hours of initial exposure.
- Antiviral therapy should be given as soon as possible, either before or at the time of exposure, and at least within 48 hours of initial exposure.

3.2 Notification System of the Disease

The Animal Disease Act No 17 (2003) provides for immediate reporting of notifiable animal diseases and the current list proscribed from time to time by the DVS includes Avian Influenza.

The notification scheme is presented in **Annex 6** with the frontline reporting post being either the traditional or commercial poultry farmer when the disease occurs in poultry. In wildlife the disease may first be suspected following deaths of wild birds in large numbers and such an event will first be noticed by game rangers, commercial hunters and bird catchers.

The law demands the DVS be notified on confirmed cases of emergency diseases that in turn within 48 hours must convene the Technical Expert Group to investigate the case and the National Animal Disease Emergency Committee (the Task Group) to chart out containment and biosecurity strategies.

3.3 Biosecurity

Anyone coming into contact with poultry or their manure/litter runs the risk of spreading animal diseases. Biosecurity is the prevention of disease causing agents entering or leaving a livestock premises. It involves a number of measures and protocols designed to prevent potential disease causing agents being spread from one premises to another.

The National Technical Expert Group will produce biosecurity guidelines for all those who go onto farms. It applies to everyone who enters a farm or premises with farm animals or enters land used for grazing or keeping farm animals. It applies to all animal diseases covered and includes poultry. All personnel implementing this contingency plan in the field must follow this guidance.

Poultry owners, (particularly those with backyard flocks), game and wild bird keepers should keep wild birds, dogs, cats, rodents and other livestock out of poultry buildings and feed stores.

3.4 ANIMAL WELFARE

If welfare problems arise which cannot be alleviated by management or husbandry practices, poultry keepers will be given the opportunity to move their birds under licence.

In order to reduce the risk of exposure it may be necessary to house poultry. Free-range producers should ensure that adequate contingency arrangements are in place for providing for the welfare of free-range birds when they need to be kept housed. A welfare disposal scheme will be introduced, following a declaration by a veterinary surgeon that the birds in question are suffering (or will suffer in next four weeks) welfare problems, which are directly attributable to the movement restrictions. The DVS or veterinary inspector will arrange the killing and disposal of birds. The killing will take place on farms, not in slaughterhouses.

There would be no compensation for birds slaughtered under a disposal scheme.

3.5 Compensation and Valuation of Poultry for Compensation

Compensation is payable at 100% of the market value for birds that are not affected with disease at the time of slaughter. Compensation is not payable for diseased or dead birds.

Valuation of poultry for compensation will thus follow the straight line market valuation system. To calculate the amount of compensation, birds are counted or accurately estimated and valued.

3.6 Slaughter

In the event of AI being identified the slaughter of poultry would be considered as a control measure in order to eliminate disease. The DVS will deploy a range of slaughter techniques depending on the numbers, species and location of the birds. Contingency contracts are in place with poultry catchers and killers.

3.7 Disposal

In an outbreak of AI the disposal of carcasses and other poultry products (e.g. eggs) by incineration or rendering would be implemented immediately.

3.8 Cleansing and Disinfection of affected premises

Preliminary cleansing and disinfection of farm premises will remain the responsibility of District Local Command Teams. The DVS under emergency operational support will provide logistic support to undertake primary disinfection measures while secondary disinfection of farm premises will remain the responsibility of the owner.

3.9 Lifting of restrictions on the premises

When the cleansing and disinfection of infected premises has been completed satisfactorily, the premises will remain under restriction for at least 21 days. After this, sentinel poultry can be introduced to the premises, under licence.

Sentinel poultry are healthy birds that are susceptible to AI infection. The purpose of introducing sentinel birds is to detect the presence of any remaining AI virus. It is

assumed that if virus remains, birds will become infected and display signs of disease. The health of the sentinel poultry will be monitored over the next 21 days to detect signs of disease. The restrictions on the premises will be lifted if the sentinel poultry remain free from disease caused by AI over the next 21-day period. If the owner decides not to use sentinel poultry, the premises will remain under restrictions for 56 days from the date that cleansing and disinfection had been completed to the satisfaction of a veterinary inspector.

Protection Zone controls measures will apply for at least 21 days after the preliminary cleansing and disinfection of all infected premises, after which time the PZ becomes part of the Surveillance Zone (SZ).

The SZ will remain in place until a minimum period of 30 days has passed from the completion of the preliminary cleansing and disinfection of the last IP. The infected area will be lifted after all surveillance visits and laboratory tests have been reported as negative, indicating that no AI virus remains.

3.10 SEROLOGY - Surveillance

Serological surveillance will be carried out for a number of reasons, including epidemiology and declaring surveillance and protection zones to be free from disease. Serological surveillance in support of lifting restrictions will not commence until at least 21 days following preliminary cleansing and disinfection of an infected premises.

3.11 Diagnostic Testing

ADRI Temeke will be the National Reference Laboratory for Avian Influenza. This Strategic Plan provides for capacity building for the laboratory that will ensure the lab attains biosecurity level 3 and above and capable to handle specialized molecular and immunological test for the disease

4.0 Coordination and Management

4.1 Technical Expert Group

This has been formed and will remain active as long as the disease risks persist.

Membership of the National Multi-Sectoral Technical Expert Group for Avian Influenza

1. Assistant Director Animal Health Services -*Chairperson*
2. Veterinary Epidemiologist
3. Veterinary Research Officer- Virologist
4. Veterinary Research Officer- Pathologist
5. Veterinary Laboratory Technologist
6. Animal Disease Emergency Coordinator

7. Ministry of Health Epidemiologist
8. Ministry of Health Emergency Preparedness Officer
9. Ministry of Health-Senior Research Officer (NIRM)
10. Muhimbili University College of Health Sciences-School of Public Health and Socio-Sciences
11. Ministry of Natural Resources & Tourism (Assistant Director Wildlife)
12. Ministry of Natural Resources & Tourism (Ornithologist Expert)
13. TAWIRI Veterinary Research Officer
14. Sokoine University of Agriculture -Faculty of Veterinary Medicine
15. Presidents Office Regional Administration and Local Government Authorities- (Assistant Director/Livestock Sector Advisor)
16. Prime Ministers Office-Assistant Director Disaster Management Operations

Terms of Reference for the Technical Expert Group

- (i) Assess and Review the Epidemiological Status of the Disease
- (ii) Coordinate Epidemio-Surveillance and Biosecurity operations
- (iii) Undertake Risk Analysis
- (iv) Prepare Contingency Plan
- (v) Prepare Emergency Preparedness Plan
- (vi) Form the National Technical Command Post in the event of the disease
- (vii) Advise the National Avian Influenza Joint Task Group
- (viii) Reports to the Director of Veterinary Services copy to the Director of Preventive Medicine (MOH), Director of Wildlife (MNRT) and Director of Disaster Management in PMO

4.2 National Animal Disease Emergencies Coordination Committee (NADECC)

This is the National Task Force or Group that has been formed at Sectoral (Ministry of Health has a National Emergency Preparedness & Response Technical Experts and Task Group while the Ministry of Livestock Development has the same set-up formed under the Rinderpest Emergency Preparedness Plan) and National Level - Multisectoral Joint Task Group) As for the National Animal Disease Emergency Committee this will be activated and convened to lead the disaster response.

Membership of the National Joint Task Group on Avian Influenza

From the Lead Agency-Ministry of Water and Livestock Development

- 1) Director of Veterinary Services-Chairperson
- 2) Director of Animal Production-Member
- 3) Director of Livestock Research and Training-Member
- 4) Registrar Veterinary Council of Tanzania
- 5) Director of Policy and Planning-Member
- 6) Director of Animal Disease Research Institute-Member

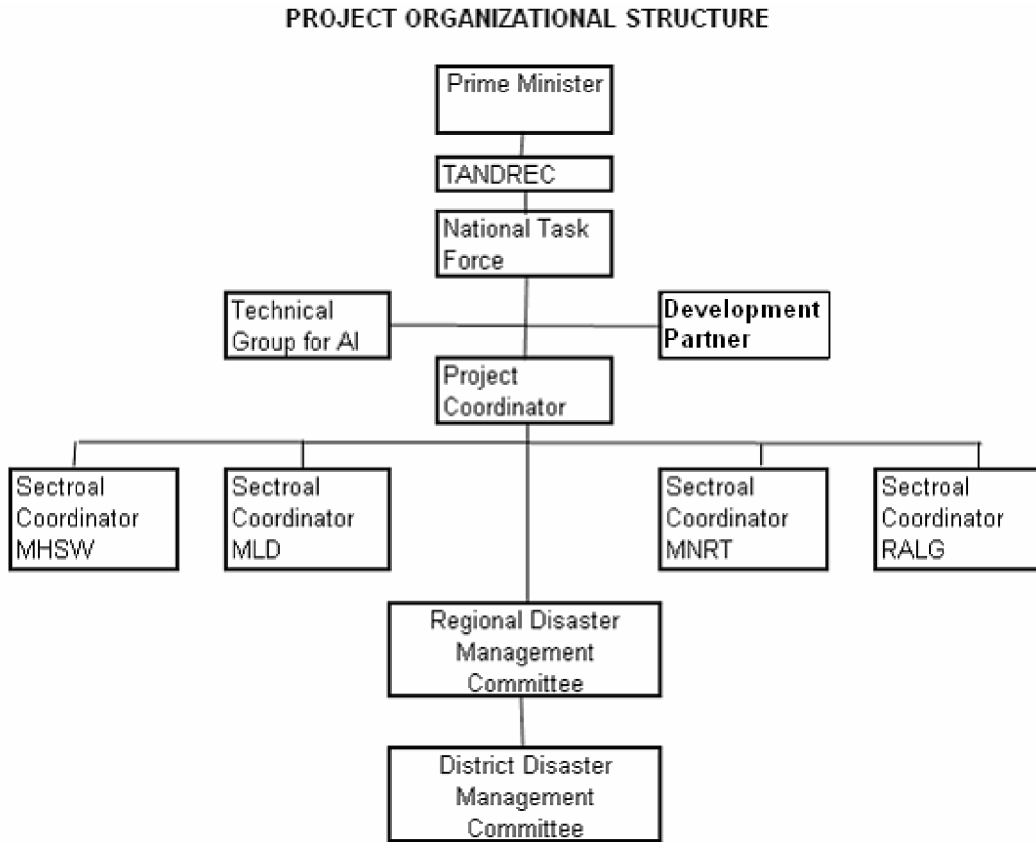
From Support Agencies

- 7) Director of Disease Prevention-Ministry of Health-Co-Chairperson
- 8) Director of NIRM- Ministry of Health-Member
- 9) Director of Disaster Management-Prime Ministers Office-Member
- 10) Director responsible for Plant Pests Control from the Ministry of Agriculture and Food Security-Member
- 11) Director responsible for Agricultural Sector Coordination Unit in the President Office Regional Administration and Local Government-Member
- 12) Dean Faculty of Veterinary Medicine Sokoine University of Agriculture
- 13) Dean School of Public Health and Socio-sciences of the Muhimbili University College of Health Sciences-Member.
- 14) Commissioner of Operations (Police) -Ministry of Home Affairs –Member
- 15) Commissioner of Operations (Immigration)- Ministry of Home Affairs –Member
- 16) Representative of the National Environment Management Council-Member
- 17) Representative of the Attorney Generals Chambers
- 18) Director of Wildlife-Member
- 19) Representative of the FAO Country Representative
- 20) Representative of the WHO Country Office
- 21) Representative of Tanzania Wild bird Exporters Association -Member
- 22) Representative of the Poultry Producers-Member
- 23) Representative of Private Animal Health Service Providers-Member

Terms of Reference of the Task Force Group

- Assess and Review Emergency Status as appraised by the Technical Expert Group
- Approve and endorse recommendations, work plan and budget from the Technical Expert Group
- Advise the Permanent Secretary of the Lead Agency and the Secretary of the Tanzania National Disaster Reduction Committee-TANDREC (the Director of Disaster Management in the PMO))
- Submits and follow up requests to TANDREC to mobilize resources to handle the Emergency
- Meet on a regular basis as the need may arise or dictate.
- Coordinate Mitigation and Response Measures on the hazard.
- Reports to the Permanent Secretary Ministry of Water and Livestock Development and the Director of Disaster Management in the PMO as Secretary of TANDREC

ANNEX 7. PROJECT ORGANIZATIONAL STRUCTURE



ANNEX 8 FLOW DIAGRAM OF EVENTS FOLLOWING AVIAN INFLUENZA OUTBREAK

