

AFRICAN DEVELOPMENT FUND

**THE UNITED REPUBLIC OF TANZANIA
LIVESTOCK MARKETING PROJECT**

PROJECT COMPLETION REPORT

AGRICULTURE AND RURAL DEVELOPMENT DEPARTMENT
NORTH, EAST AND SOUTH REGIONS (ONAR)

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ABBREVIATIONS AND ACRONYMS

AAR	Annual Audit Report
ADB	African Development Bank
ADF	.....	African Development Fund
AR	.....	Appraisal Report
CDA	.....	Capital Development Authority (Dodoma)
cwbs	.....	Cattle Wagon Bogies
DEM	.....	Deutsche Mark
DLDS	.....	Dodoma Livestock Development Study
DLP	.....	Defects Liability Period
DTTEM	.....	Deloitte Touche Tohmatsu Emerging Markets
EA	.....	Executing Agency
EIA	.....	Environmental Impact Assessment
EIRR	.....	Economic Internal Rate of Return
ESMP	.....	Environmental and Social Management Plan
EMP	.....	Environmental Monitoring Plan
Equip.	.....	Equipment
FA	.....	Force Account
FAO	.....	Food and Agriculture Organisation (of the United Nations)
FAO/IC	.....	FAO/Investment Centre
FY	.....	Financial Year
GDP	.....	Gross Domestic Product
GoT	.....	Government of Tanzania
ha	.....	Hectare(s)
IAPSO	.....	Inter-Agency Procurement Services Office (UNDP)
ICB	.....	International Competitive Bidding
JP¥	.....	Japanese Yen
kg	.....	kilogramme(s)
km	.....	kilometre(s)
LA	.....	Local Authorities
LC	.....	Local Competition
LC	.....	Local Costs
LCB	.....	Local Competitive Bidding
LOGS	.....	List of Goods and Services
Ltd	.....	Limited
m	.....	metre(s)
m ³	.....	cubic metre(s)
M&E	.....	Monitoring and Evaluation
MALDC	.....	Ministry of Agriculture, Livestock Development and Cooperatives
MDB	.....	Marketing Development Bureau
MITC	.....	Meat Industry Training Centre
MoLD	.....	Ministry of Livestock Development
no./No.	.....	Number
n.a.	.....	Not applicable
NCB	.....	National Competitive Bidding
NEMC	.....	National Environmental Management Council
NGO	.....	Non-governmental Organisation
O&M	.....	Operation and Maintenance
para.	.....	Paragraph
PCR	.....	Project Completion Report
pm	.....	person-months
PMU	.....	Project Management Unit
PSC	.....	Project Steering Committee
PY	.....	Project Year

Abbreviations and Acronyms (cont'd)

QPR	.....	Quarterly Progress Report
ref.	.....	Reference
Rehab.	.....	Rehabilitated/rehabilitation
RSA	.....	Republic of South Africa
SA	.....	Special Account
SAR	.....	Staff Appraisal Report (Appraisal Report)
shoats	.....	Sheep and goats (small ruminants)
t	.....	Metric Tonne (1000 kg)
TA	.....	Technical Assistance
TANESCO	.....	Tanzania Electricity Supply Company
TISCO	.....	Tanzania Industrial Studies and Consulting Organisation
TLMA	.....	Tanzania Livestock Marketing Agency
TLMIS	.....	Tanzania Livestock Marketing Information System
TLMP	.....	Tanzania Livestock Marketing Project
TRC	.....	Tanzania Railways Corporation
TZS	.....	Tanzania Shillings (local currency)
UA	.....	Unit of Account (ADB)
UK	.....	United Kingdom
UN	.....	United Nations
USD (US\$)	.....	United States Dollar
Vet.	.....	Veterinary
VETA	.....	Vocational Education Training Authority
Vs	.....	versus/against
ZAR	.....	South African Rand
---	.....	Data not available
%	.....	percent
% age	.....	percentage
&	.....	and
#	.....	number
/	.....	per
1 st	.....	first
2 nd	.....	second
3 rd	.....	third

This report was prepared by three Consultants: an Agricultural Economist; a Livestock Marketing Expert; and a Civil Engineer following their mission to Tanzania in January/February 2006. All questions relating to the report should be addressed to Mr. A.D. Beileh, Division Manager, ONAR.1 (Extension 2139).

BASIC PROJECT DATA SHEET

1	Loan Number	2100150001003
2	Borrower Name	Ministry of Finance
3	Guarantor	Government of Tanzania
4	Beneficiary	Tanzania Livestock and Marketing Project; and Tanzania Railways Corporation
5	Executing Agency	Ministry of Agriculture, Livestock Development and Cooperatives (through Tanzania Livestock and Marketing Project) and Tanzania Railways Corporation

A. LOAN

ADF Loan		Appraisal Estimate	Actual (PCR)
1	Amount (UA million)	UA 9.21 million	UA 8.49 million
2	Service Charge (%)	0.75% per annum (on loan amount disbursed and outstanding)	0.75% per annum (on loan amount disbursed and outstanding)
	Interest (Repayment) Rate	1% per annum from 11 th to 20 th year inclusive and 3% per annum thereafter	1% per annum from 11 th to 20 th year inclusive and 3% per annum thereafter
3	Repayment Period	50 years (including grace period) from date of signature of the Agreement	50 years (including grace period) from date of signature of the Agreement
4	Grace Period	10 years	10 years
5	Loan Negotiation Date	Not Indicated	Data Not Available
6	Loan Approval Date	January 1992	27 th January 1992
7	Loan Signature Date	June 1992	1 st December 1992
8	Date of Entry into Force	Not Indicated	12 th July 1994
9	Loan Effectiveness	December 1992	12 th July 1994

B. PROJECT DATA

Project Cost and Financing		Appraisal Estimates			Actual		
		Foreign	Local	Total	Foreign	Local	Total
1	Total Cost (UA million)	6.72	3.70	10.42	4.45	7.54	11.99
2	Financing Plan						
	ADF (UA million)	6.72	2.49	9.21	4.45	4.04	8.49
	GOT (UA million)	0.00	1.21	1.21	0.00	3.50	3.50

3. Effective Date of First Disbursement (ADF Loan): 5th August 1994
4. Effective Date of Last Disbursement (ADF Loan): 31st December 1998 (Initial)
31st July 2001 (1st Extension)
31st July 2003 (2nd Extension)
31st December 2003 (3rd Extension)
31st December 2004 (4th Extension)
31st December 2005 (5th Extension)
5. Commencement Date of Project Implementation Activities: August 1994
6. Completion Date of Project Implementation Activities: 25th October 2005¹

¹ End of Defects Liability Period for Dodoma Abattoir and MITC (civil works).

C. PERFORMANCE INDICATORS

1.	Project Cost over-run (%)	15% (UA 1.57 million)	
2.	ADF Loan Cost under-run (%)	8% (UA 0.72 million)	
3.	Time over-run		
	* Slippage of Effectiveness of ADF Loan	(400%) 2 years	
	* Slippage of Completion Date	(160%) 8 years	
	* Slippage of Last Disbursement Date	(150%) 7 years	
	* Number of Extensions of Last Disbursement Date	5	
4.	Project Implementation Status	Completed	
5.	List of Verifiable Indicators and Levels of Achievement (expressed as percentage on planned levels)	See Annex 9	
6.	Institutional Performance	Satisfactory	
7.	Contractors' Performance	Satisfactory	
8.	Consultants' Performance	Satisfactory	
		Appraisal	PCR
9.	EIRR (%)	10 (without Export)	8 (without Export)
	EIRR (%)	16 (with Export)	NA

D. BANK MISSIONS

Mission Type	Date/period	No of Persons	Composition	Person Days
Identification & Preparation	June 1991	5	Mission Leader, Economist, Marketing Specialist, Abattoir Specialist, & Livestock Specialist	--- ²
Appraisal	December 1991	4	Principal Veterinary officer, Agricultural Economist, Abattoir Specialist & Extension Specialist	---
Supervision	11 th to 17 th July 1993	4	Chief, East Africa Division, Principal Veterinary Officer, Principal Agronomist, Senior & Disbursement Officer	24
Supervision	12 th to 25 th September 1993	1	Principal Veterinary Officer	13
Supervision	8 th to 14 th September 1994	1	Senior Agricultural Economist	6
Supervision	18 th April to 3 rd May 1995	3	Senior Agricultural Economist, Agronomist & Director Agriculture and Rural Development Department (SR)	45
Supervision	24 th November to 8 th December 1996	2	Livestock Specialist, Agricultural Economist & Marketing Specialist (FAO Investment Centre on behalf of ADB)	28
Country Strategy Paper and Portfolio Review	31 st January to 21 st February 1997	5	Senior Country Economist, Agricultural Economist, Agronomist, Public Utilities Economist & Education Architect	105
Supervision	16 th May to 4 th June 1997	2	Agricultural Economist & Financial Analyst	38

² --- = Actual mission period was not specified

Mission Type	Date/period	No of Persons	Composition	Person Days
Supervision	14 th February to 6 th March 1998	2	Agricultural Economist & Agronomist	40
Supervision	14 th February to 6 th March 1999	3	Agricultural Economist, Financial Analyst & Livestock Specialist	60
Supervision	17 th to 30 th April 1999	3	Agricultural Economist, Forestry Expert & Environmentalist	39
Supervision	13 th to 16 th December 1999	1	Agricultural Economist	3
Supervision	24 th April to 6 th May 2000	2	Senior Agronomist & Programme Officer	24
Supervision	30 th July to 7 th August 2000	1	Senior Livestock Officer	8
Audit Mission	21 st November to 1 st December 2000	2	Principal Auditors	20
Supervision	9 th to 23 rd February 2001	2	Senior Livestock Officer & Financial Officer	28
Supervision	24 th August to 8 th September 2001	2	Principal Agricultural Economist & Senior Agronomist	30
Joint Country Portfolio Review	12 th to 19 th September 2001	7	Manager Country Operations Division (East), Principal Country Economist, Chief Education Analyst, Senior Health Analyst, Senior Agronomist, Chief Transport Engineer & Principal Transport Economist	49
ADB Executive Director's Visit	27 th January to 2 nd February 2002	1	Executive Director	6
Supervision	3 rd to 15 th March 2002	1	Principal Financial Analyst	12
Supervision	19 th to 27 th May 2003	2	Senior Livestock Officer & Research Assistant	16
Supervision	5 th to 19 th April 2004	1	Senior Livestock Officer	14
Supervision	13 th to 18 th December 2004	1	Senior Livestock Officer	5
PCR	15 th January to 9 th February 2006	3	Agricultural Economist, Livestock Marketing Expert & Civil Engineer	72

E. DISBURSEMENT

a. ADF Summary Loan Disbursement

ADF Loan	Appraisal Estimate (UA million)	Actual (UA million)	Percentage Disbursed
Total Disbursed	9.21	8.49	92.2%
Amount cancelled	NA	Nil	Nil
Unused Balance	NA	0.72	NA
Average Yearly Disbursement	1.84	0.65	35.3%

b. ADF Loan Yearly Disbursements and Government Contribution

Year	Appraisal Amount (UA million)			%age of Total	Actual (PCR) Amount (UA million)			%age of Total
	ADF	GoT	Total		ADF ³	GoT	Total	
1993	1.66	0.14	1.80	17.3	-	-	-	-
1994	2.60	0.32	2.92	28.0	0.70	0.15	0.85	7.1
1995	2.02	0.27	2.29	22.0	0.22	0.05	0.27	2.2
1996	1.62	0.24	1.86	17.8	0.17	0.29	0.46	3.8
1997	1.31	0.24	1.55	14.9	0.28	0.32	0.60	5.0
1998	-	-	-	-	0.75	0.30	1.05	8.8
1999	-	-	-	-	0.70	0.36	1.06	8.8
2000	-	-	-	-	0.60	0.41	1.01	8.4
2001	-	-	-	-	1.09	0.41	1.50	12.5
2002	-	-	-	-	1.68	0.44	2.12	17.7
2003	-	-	-	-	0.47	0.55	1.02	8.5
2004	-	-	-	-	1.23	0.22	1.45	12.1
2005	-	-	-	-	0.51	-	0.51	4.3
2006	-	-	-	-	0.09	-	0.09	0.8
Total	9.21	1.21	10.42	100.0	8.49	3.50	11.99	100.0

F. SUPPLIERS/CONTRACTORS

Name	Contract (Items)	Date Contract Signed	Date Contract Finished	Contract Duration (Months)	Amount (contract currency)
International Communications System Ltd (ICS)	Computer, printer and Photocopier	September 1996	September 1996	1	USD 20,231.00
International Communications System Ltd (ICS)	Supply & Installation of Radio Communication (12no Radios: 2no mobile and 10no station based)	September 2002	November 2002	3	USD 14,800.00
IAPSO ⁴	Motor-cycles DT125 CC	12 th August 1998	November 1998	3.5	JP¥ 8,574,900.00
IAPSO	Motor Vehicles	12 th August 1998	November 1998	3	JP¥ 2,832,100.00
IAPSO	Tipper Truck 7-Ton	12 th August 1998	November 1998	3	JP¥ 5,681,500.00
IAPSO	Computer/office & GPS Equipment	15 th November 1998	December 1998	6 weeks	USD 15,181.53
IAPSO	Audio Visual Equipment	14 th April 2000	4 th July 2000	3	USD 15,295.00
IAPSO	Motor Vehicles: 1no. Nissan SW GL 4x4 4no. Toyota Pick-up 4x4	19 th May 2000	August 2000	3	JP¥ 11,579,450.00
IAPSO	Computer & Accessories	12 th July 2000	August 2000	3 weeks	USD 12,090.41
Jos Hansen and Soehne GmbH	Farm Machinery and other implements	2 nd April 2001	18 th July 2001	4	DEM 377,441.83
Toyota Tanzania Ltd	Motor Vehicles: 1no Toyota SW STD 4x4 2no. Toyota Pick-up 4x4	16 th June 2004	13 th October 2004	4	JP¥ 8,484,300.00
D T Dobie (T) Ltd	Meat Van: 1no. Horse 1no. Refrigerated Truck	18 th June 2004	15 th October 2004	3	USD 64,918.00 ZAR 455,538.00

³ Ref: Summary Loan Ledger (ADF): Printed on 14th February 2006⁴ IAPSO : Inter-Agency Procurement Services Office (United Nations)

Name	Contract (Items)	Date Contract Signed	Date Contract Finished	Contract Duration (Months)	Amount (contract currency)
Micronix Systems Ltd	Computers: 7no. Laptop Computers 6no. Desk-top Computers	20 th December 2004	28 th January 2005	3	USD 31,140.00
D T Dobie (T) Ltd	Ino. Civilian Mini Bus 4x4	20 th December 2004	19 th April 2005	3	JP¥ 4,585,124.00
Rukwa Building Contractors Limited	Pugu Holding Ground (Civil Works)	27 th May 1998	23 rd November 1998	6	TZS 32,330,000.00
Rukwa Building Contractors Limited	Weruweru Holding Ground (Civil Works)	27 th May 1998	23 rd November 1998	6	TZS 51,593,600.00
K's Builders Limited	Korogwe Holding Ground (Civil Works)	27 th May 1998	23 rd November 1998	6	TZS 27,560,865.00
China Geo Engineering Corporation	Dodoma Abattoir and Meat Industry Training Centre (Civil Works)	3 rd July 2002	25 th October 2005	24	TZS 2,638,617,000.00

G. CONSULTANTS

Name	Contract (Description)	Date Contract Signed	Date Contract Finished	Contract Duration (Months)	Amount (contract currency)
DANAGRO (Scanagri)	Technical Assistance	12 th July 1994	December 2002	111	USD 2,058,490.00
TISCO, Meatang and Africon (consortium)	Dodoma abattoir and Meat Industry Training Centre (Design and Supervision)	9 th November 1998	29 th June 2004	68	USD 196,000.00
JSB Envidep Ltd (Environment and Development Management Consultants)	Environmental Impact Assessment of Dodoma Abattoir and Associated Marketing Infrastructure Project	November 2002	December 2002	2	<i>Data Not Available</i>
DANAGRO (Scanagri) (Extension period)	Technical Assistance	11 th December 2002	October 2004	22	USD 607,150.00
Deloitte Touche Tohmatsu Emerging Markets (Canada)	Environmental Impact Assessment Review of Dodoma Abattoir and Associated Marketing Infrastructure Project	January 2003	February 2003	2	<i>Data Not Available</i>

TANZANIA LIVESTOCK MARKETING PROJECT (PROJECT COMPLETION REPORT)
RETROSPECTIVE PROJECT LOGICAL FRAMEWORK (PROJECT MATRIX)

<u>NARRATIVE SUMMARY</u>	<u>OBJECTIVELY VERIFIABLE INDICATORS</u>			<u>VERIFICATIONS</u>	<u>ASSUMPTIONS</u>	
<u>SECTOR GOALS</u> To increase the sector's contribution to the GDP growth and to poverty reduction.	Target Set at Appraisal Not Given		Actual (PCR) Data not Available	Government Statistical Reports.		
<u>OBJECTIVES</u> (Medium-Term Outcome) To increase the volume of wholesale meat available for local and export markets by increasing the cattle off-take rate from 9.8% to 13.7% and by reducing weight loss rate from 12% to 7% (by 5%) and mortality from 5% to 3% (by 2%) through strengthening of livestock marketing services and infrastructure, and provision of institutional support.	<u>Item</u>	Target Set at Appraisal <u>1992</u> <u>1997</u>		Actual/PCR <u>2005</u>	TLMP and Ministry of Livestock Development Reports	-Sound government macro-economic and livestock sector policy reforms maintained. - Linkages to higher level national development goals defined in terms of economic growth with equity. - Political stability
Increase in Off-take Rate	9.8%	13.7%	10.0%			
Reducing Weight Loss Rate	12.0%	7.0%	10.0%			
Reducing Mortality Rate	5%	3%	0.2%			
<u>OUTPUTS</u>	<u>Planned Targets (Appraisal 1992)</u>			<u>Modified Targets (April 1995)</u>	<u>Actual by 2005 (PCR)</u>	
1.1 Night Camps Constructed/Rehab.	1.1 By PY5 (96/97):	90	90	90	TLMP Quarterly Progress reports.	- Competent technical personnel identified and recruited.
1.2 Check Points Constructed/Rehab.	1.2 By PY5 (96/97):	15	15	15		
1.3 Holding Grounds Constructed/Rehab.	1.3 By PY5 (96/97):	13	13	13		
1.4 Markets Constructed/Rehabilitated	1.4 By PY5 (96/97):	56	56	56	Borrower's PCR.	- TLMP staff are well trained and highly motivated through provision of adequate field, housing allowances and logistical support
1.5 Stock Routes Cleared/Rehabilitated	1.5 By PY5 (96/97):	3,000 km	1,200 km	940 km	TRC Reports.	
1.6 Railway Sidings Rehabilitated	1.6 By PY4 (95/96):	45	10	9		
1.7 Railway Cattle Wagons Bogies Rehab.	1.7 By PY3 (94/95):	98	60	60		
1.8 Revolving Fund for Vet. Drugs/Equip.	1.8 By PY5 (96/97):	28 sets	28 sets	0	Project records.	- Continuity of service of key TLMP officers after their training.
1.9 Radio Communication Equipment	1.9 By PY1 (92/93)	1 set	12 sets	12 sets	Bank Technical Supervision Reports & Aide Memoires.	- Routine maintenance of rehabilitated and newly constructed facilities.
2.1 Abattoir Constructed and Operational	2.1 By PY4 (95/96)	1	1	1		
3.1 MITC Constructed and Operational	3.1 By PY5 (96/97)	1	1	1		
3.2 Regional Staff Study Tours Conducted	3.2 By PY5 (96/97)	5	5	2		

<u>NARRATIVE SUMMARY</u>		<u>OBJECTIVELY VERIFIABLE INDICATORS</u>				<u>VERIFICATIONS</u>	<u>ASSUMPTIONS</u>
3.3	TLMP Professional Staff Trained	3.3	By PY5 (96/97)	40	45	33	
3.4	Technical Assistance Recruited	3.4	By PY5 (96/97)	157 pm ⁵	157 pm	114.5 pm	
3.5	Project Management Unit Created						
	3.5.1 PMU Senior Staff	3.5.1	By PY5 (96/97)	276 pm	276 pm	1,006 pm	
	3.5.2 PMU General Staff	3.5.2	By PY5 (96/97)	2,736 pm	2,736 pm	1,186 pm	
3.6	Marketing Information Service Developed	3.6	By PY5 (96/97)	100%	100%	25%	
<u>ACTIVITIES</u>		<u>ADF LOAN ALLOCATION</u>				TLMP accounts, Bank Disbursement Records, and Annual Audit Reports	<ul style="list-style-type: none"> - Procured goods and services for the project available on time & according to budgeted costs. - No loans sanctions imposed. - Tender documents processed and approved timely. - Government and ADF financial contributions released adequately and on time. - Contractor's & consultant's willingness to provide services
				<u>APPRAISAL</u> (UA million)	<u>PCR (2005)</u> (UA million)		
1.	Strengthening of Livestock Marketing Services and Infrastructure	1.	Strengthening of Livestock Marketing Services and Infrastructure	4.29	4.08		
2.	Construction of a Modern Abattoir in Dodoma City	2.	Construction of a Modern Abattoir in Dodoma City	1.72	1.57		
3.	Institutional Support	3.	Institutional Support				
	(i) Meat Industry Training Centre		(i) Meat Industry Training Centre	0.64	0.58		
	(ii) Training & Project Management Unit		(ii) Training & Project Management Unit	0.89	0.83		
	(iii) Technical Assistance		(iii) Technical Assistance	1.67	1.43		
			Total	9.21	8.49		

⁵ pm = person-months

EXECUTIVE SUMMARY

Project Sector Goal and Objectives: The project's long term goal was to increase sector's contribution to the GDP growth and to poverty reduction; while its immediate objective was to increase the volume of wholesale meat available for local and export markets by increasing the cattle off-take rate from 9.8% to 13.7%, by reducing weight loss rate from 12% to 7%, and mortality rate from 5% to 3%.

Project Description: The project activities defined at appraisal were implemented under three main components namely: (i) Strengthening of Livestock Marketing Services and Infrastructure, (ii) Construction of a Modern Abattoir in Dodoma City, and (iii) Institutional Support which included: construction of Meat Industry Training Centre (MITC); Training and Project Management; and Technical Assistance.

Implementation: The project was initially planned for 5 years starting from December 1992 to December 1997. However it was completed in December 2005, approximately 11 years after loan effectiveness. The delays were mainly caused by: (i) delay in fulfilling the loan conditions; (ii) difficulties in identifying and recruiting right personnel for the Project Management Unit (PMU); (iv) inadequate experience of PMU staff in the Bank's rules of procedure for procurement and disbursement; (iv) unsuitable modes of procurement; (v) delays in production of design for infrastructure due to unavailability of Environmental Impact Assessment study report, and (vi) unavailability of adequate water supply, on site, for the Dodoma abattoir. Physical implementation of field activities started in July 1997 and deadline for final disbursement was extended five times from 31st December 1998 to 31st December 2005.

Achievements of Project Outputs and Outcomes: Despite delays, almost all project outputs were achieved. Marketing infrastructure and services have been strengthened and are operational and have impacted positively on cattle off-take rate to 10% as compared to 9.8% (1991). Improvement in railway and trucking transportation has led to reduction in weight loss of animals from 12% to 10% and mortality rate from 5% to 0.2%. Owing to the Dodoma abattoir, the consumers are assured of regular supply of clean and wholesome meat produced under hygienic conditions. MITC is providing training to improve skills of meat industry workers. The project has, therefore, partially achieved the immediate objective and might be fully realized, in future, through good maintenance of marketing infrastructure and continuous provision of institutional support.

Loan Utilisation: Out of UA 9.21 million, total loan disbursement at the project closure on 31st December 2005 was UA 8.49 million, with a cost under-run of 8% (UA 0.72 million).

Counterpart Funding: At appraisal, Government was expected to contribute UA 1.21 million. However, due to prolonged implementation period, it's contribution reached UA 3.50 million (29.2 % of total cost) as opposed to the appraisal estimate of UA 1.21 million (11.6%).

Sustainability and Viability: Most of the physical infrastructures established in the project are in reasonable condition and operational. Project staff and other people in meat industry have been properly trained to improve their knowledge and skills. In order to ensure long term sustainability of the abattoir and market infrastructure, the Government is intending to privatize them.

Conclusions and Recommendations: Despite long delays at the start and during implementation, the project has successfully established environmentally sound physical marketing infrastructure. The Bank should ensure that for all future projects, baseline studies, EIA, civil works design, and mid-term reviews are timely conducted. The Borrower should be trained in Bank rules of procedure for procurement of goods, works and services, and disbursement of the Bank Group loan at the start of the project.

1. INTRODUCTION

1.1 During 1990/91, Tanzania had the third largest livestock population in Africa, and the national herd was considered to be one of the principal resources of the country. However, over the years, the potential contribution of livestock to the national economy started to decline primarily as a result of near collapse of marketing channels and loss of meat exports. The marketing infrastructure (markets, stock routes, holding grounds, night camps) had fallen into disrepair. In absence of this facility, animals had to be trekked over long distances from the production areas to the main demand centres, often resulting into high losses in body weight, high mortality and poor quality meat. The slaughter facilities were also of very low standards.

1.2 At present, the livestock sub-sector contributes 13% and 6.1% to Agricultural and National GDP respectively. About 40% of the 3.9 million agricultural households are involved in mixed crop-livestock production. As per the livestock statistics data of the Department of Animal Production, GoT, as of year 2004/05, there were 18.4 million cattle, 13.1 million goats and 3.5 million sheep. The production was 0.2 million tons beef, 0.08 million tons lamb/mutton, 1.6 million hides and 1.5 million goat skins. The major export was from hides and skins.

1.3 The livestock sub-sector has been identified by the GoT as an important tool and contributor to the rural poverty alleviation programmes. The GoT has prepared the National Livestock Policy (2005) that aims at stimulating development of livestock industry with a view to increase rural and national income, improve human nutrition, exploit the natural resources in a sustainable manner; and have self reliance, gender equality and improved well-being of all stakeholders. The GoT has launched several livestock development programmes with a particular focus to providing better opportunity to rural livestock smallholders to improve their income, employment and livelihood.

1.4 The Government strategy for accelerated agricultural development and poverty reduction is in line with the Bank Group Revised Agriculture and Rural Development Sector Policy 2000. As of March 2006, the Bank Group had approved 64 loans and 28 grants to finance 84 operations comprising 50 projects, 23 studies, 6 policy-based loans, 3 lines of credit and 2 debt relief operations. The total commitments on these operations, net of cancellations, amounted to UA 873.62 million and comprised of UA 56.81 million from ADB, UA 804.89 million from ADF and UA 11.92 million from NTF. The sectoral distribution of the cumulative Bank Group Portfolio in Tanzania showed that as at March 2006, multi-sector operations had the largest share (25.5%), followed by transport (22.5%), agriculture (21.4%), public utilities (20.3%), social sector (8.5%) and industry and mining (1.8%). Out of 84 operations, there were 19 agricultural operations of which 4 were livestock projects, including Tanzania Livestock Marketing Project (TLMP).

1.5 This report presents a summary of performance during project implementation and the lessons learnt that would be useful for managing future interventions in the livestock sector of Tanzania and in other regional member countries. Background documents for development of this PCR included Appraisal Report, Borrower's PCR, Project consultants' reports, audit reports, project files, Bank's mission reports, quarterly progress reports, and other documents listed in Annex 7.

2. PROJECT OBJECTIVES AND FORMULATION

2.1 Project Objectives

The project's long-term development goal was to increase the sector's contribution to the GDP growth and to poverty reduction; while its immediate objective was to increase the volume of wholesale meat available for local and export markets by increasing the cattle off-take rate from 9.8% to 13.7% and by reducing weight loss rate from 12% to 7% and mortality rate from 5% to 3%.

2.2 Project Formulation and Preparation

2.2.1 According to the statistical records from the Ministry of Livestock Development, cattle population grew by 2.7% per year during the 1965-1978 period, but by only 0.8% from 1978 to 1989. During the same period, the livestock contribution to GDP also started to decline from 10% (1965-1978) to 4.5%, largely as a result of collapse of marketing infrastructure and veterinary services as well as a sharp decline in export market and the weak domestic demand for meat, which was due to the high prices and low purchasing power of the consumer. Stock routes were used more as a source of collecting revenue, but with no plough-back for the maintenance or improvement of these infrastructures. Tanzanian Railways Corporation (TRC) used to operate a fleet of cattle wagon bogies (cwbs), thus, providing valuable service to evacuate livestock from remote areas, which were unreachable by road and impenetrable during the rainy season. However, it was estimated that by 1989, only 25% of the TRC fleet of cwbs were functional, a situation which led to erratic scheduling and long delays. This prompted livestock owners to resort to unregulated and excessive trekking, which in turn resulted in high weight losses, leaner animals, tougher meat, higher mortalities, spread of diseases, overgrazing and over-trampling of areas adjacent to stock routes, and often led to severe land use conflicts.

2.2.2 During the same period, livestock slaughter facilities in the country, which form part of the marketing chains, were generally of poor standards. There were few facilities for chilling of carcasses and meat to extend shelf-life with the result that butchers were obliged to sell off all meat on the day of slaughter.

2.2.3 In order to tackle the above problems, GoT adopted a comprehensive livestock development programme for the period 1988-2000, which, among others, aimed at reversing the above trend, and developing the livestock resources in a planned manner. While the programme emphasized investments in livestock marketing as the best avenue for revitalizing the sub-sector economy, it also stressed the Government's policy to disengage from livestock marketing and all production oriented activities, and to limit its role to providing infrastructural support and essential services, and preparing conducive environment for private sector involvement.

2.2.4 In order to assist GoT to implement its livestock development programme, the Bank Group, in 1988, carried out the Dodoma Livestock Development Study (DLDS), whose recommended investment proposals included, among others, the construction of an abattoir in Dodoma. Based on the study's findings and recommendations for the need to invest in livestock activities, which would stimulate growth in the sub-sector, ADB requested Food and Agriculture Organization/Investment Centre (FAO/IC) of the United Nations to review the proposals contained in DLDS, with a view to prepare a more coherent and co-ordinated project. In consequence, FAO/IC undertook a mission in June 1991 to assist GoT in identification and preparation of the livestock marketing project.

2.3 Project Appraisal, Negotiations and Approval

FAO/IC identified and prepared the *Livestock Marketing Project*. Based on the FAO/IC's Project Preparation Report, the Bank Group mission visited the country in October 1991 to appraise the project. The ADB appraisal report was positive and encouraged the GoT to request for financial support for the Livestock Marketing Project. No details, on the loan negotiations, are available but the loan was approved on the 27th January 1992.

2.4 Project Description

2.4.1 The project activities defined at appraisal were implemented under three main components including: (a) Strengthening of Livestock Marketing Services and Infrastructure, (b) Construction of a Modern Abattoir in Dodoma City, and (c) Institutional Support which included: construction of

Meat Industry Training Centre (MITC); Training and Project Management; and Technical Assistance. The project marketing component encompassed eleven of Tanzania's northern mainland regions, see Annex 1, namely Arusha, Dodoma, Kagera, Kigoma, Kilimanjaro, Mara, Mwanza, Shinyanga, Singida, Tabora, and Tanga. Dar-es-salaam was also included because it is the main consumption area and export centre.

2.4.2 Strengthening of Livestock Marketing Services and Infrastructure: The project was to rehabilitate existent, but dilapidated structures, and replace them with functional and purpose-built infrastructures which would be privatised. The market was to be equipped with basic auction ring, pens and holding grounds with improved pastures and watering facilities. Holding grounds were to be enclosed in order to prevent market-adjacent rangelands from over-trampling. Simple quarters were to be constructed for drovers and livestock field assistants. To ensure stock movement in an environmentally sound manner, with less disease, social and predatory risks, the project was to rehabilitate/construct up to 3,000 km of stock routes with 13 associated holding grounds, 90 night camps and 15 veterinary check points complete with dip tanks, vaccination and watering facilities at strategic points along the main stock routes. The project was to revive essential veterinary back-up and extension services by providing a revolving fund to ensure the supply of essential drugs and appropriate veterinary equipment. In order to improve the marketing information system, the project would also establish a radio communication network between its base station in Dar es salaam and selected holding grounds upcountry. To cater for the shortfall in cattle wagon bogies (cwbs), the project was to fund rehabilitation of 98 cwbs operated by TRC, and modify them to carry emergency water supplies. The project was, also, to repair 45 damaged railway loading/unloading ramps for cattle and install adequate watering facilities where required.

2.4.3 Construction of a Modern Abattoir in Dodoma City: Construction of the Dodoma modern abattoir was planned to supply consumers with wholesome meat from animals slaughtered under hygienic conditions. Dodoma abattoir's design was based on the annual slaughter requirement of 25,900 cattle to satisfy the city's per capita red meat demand of 13.5 kg per year. The abattoir was planned to have a daily capacity of 60 cattle and 200 small ruminants in a single 8-hour shift. The abattoir's ancillaries would include lairages, amenities, emergency slaughter slab, hides and skins treatment and storage sheds and chillers, connection to the Dodoma water reticulation system with two 120 m³ reservoirs, provision of an independent borehole, sewerage reticulation system and treatment works, electricity supply from TANESCO substation and an independent stand-by generator. Other civil works included 2.8 km, 4-m wide sealed road network connection to the Dodoma-Singida (Bahi) road, security fencing, internal roads, pathways and aprons, and landscaping. The Project was planned to safeguard the immediate environment.

2.4.4 Institutional Support: This component was envisaged to provide an extensive training programme which included construction of the vocational MITC, overseas short-term training and regional study tours for key staff, in-service training, expansion of the marketing information service, and provision of local professional and support staff for management of the project, and long term technical assistance and short-term consultancy for areas where national manpower is in short supply or not available.

2.4.5 According to project design, MITC was to be constructed as a small-scale modular slaughter house with slaughter floor, chilling room, cutting/deboning/processing room, meat shop, lecture room, locker room, teachers' office, administration's offices, lunch room and amenities including connection to Dodoma sewerage reticulation system. MITC was planned to be constructed adjacent to the Dodoma abattoir, for practical and financial reasons, thus permitting common use of the infrastructure and services. MITC was to provide continuous in-service training and refresher courses covering pre-slaughter treatment, slaughter and hygienic dressing of animals, grading of carcasses, differential cuts of meat for retailing, processing and preservation methods, manufacture of simple meat products, cleaning, sanitation and maintenance of facilities and equipment.

3. PROJECT EXECUTION

3.1 Loan Effectiveness and Start-up

Although the ADF loan was approved by the Board on 27th January 1992 and signed on 1st December 1992, the loan was declared effective on 12th July 1994 as opposed to December 1992, envisaged at appraisal, mainly due to Government's delay in fulfilling the loan conditions, which implied a slippage of about 19 months. The first loan disbursement was made on 5th August 1994 and implementation of project activities started during the same month.

3.2 Modifications

The following changes were made to the project after thorough discussions between the Borrower and the Bank, and the latter's approval prior to implementation:

(i) Change of Procurement Mode: Although the livestock marketing infrastructures were supposed to be procured through National Competitive Bidding (NCB), the Bank later approved the Borrower's request to change the procurement mode to Force Account for minor and remotely located works and NCB for major works. Due to further delays, some remaining items which were supposed to be procured under International Competitive Bidding like vehicles, training and communications equipment were procured through UN's Inter-Agency Procurement Services Office (IAPSO); water pumps and veterinary equipment through NCB; and farm machinery and implements through Limited International Competition.

(ii) Change of Location of the Meat Industry Training Centre: MITC was originally planned to be constructed adjacent to the Dodoma abattoir. However, MITC was constructed near Vocational Education and Training Authority (VETA) in order to rationalise the construction cost and to utilise VETA's facilities, like lecture rooms, effectively and efficiently.

(iii) Change of Wagon Emergency Water Facilities: It was proposed, at appraisal, to provide water troughs in cattle-wagon bogies. However, after few trials, traders complained that water troughs were reducing the wagon's cattle carrying capacity, from 60 to 45, despite paying for the whole wagon at about 1,120 TZS/km. The results of a "Cattle Live-weight" study, conducted by students from Sokoine University of Agriculture, showed that cattle weight loss was very insignificant, with or without water facilities in the wagons, which prompted TRC and TLMP to discontinue inclusion of such facilities.

(iv) Change in PMU Staff Composition: Although the following positions were not provided for, at appraisal, they were later found necessary and were therefore added to the PMU: Civil Engineer, Assistant Civil Engineer, Project Expenditure Accountant, Administrative Assistant, Store Keeper and Tractor Operators.

3.3 Implementation Schedule

As per appraisal, the project was to be implemented within a period of 5 years starting from 1st December 1992 and ending in December 1997. However, the project implementation started in August 1994 but physical field activities commenced in July 1997 mainly due to: delay in change of procurement mode (para 3.2.1), delay in production of design for infrastructure due to unavailability of an Environmental Impact Assessment (EIA) Study Report; inadequate experience by PMU staff in the Bank's rules of procedure for procurement and disbursement; and unavailability of water supply for Dodoma abattoir. The deadline for final disbursement was extended five times from 31st

December 1998 to 31st July 2001, 31st July 2003, 31st December 2003, 31st December 2004 and 31st December 2005. Consequently, project activities were completed on 31st December 2005, approximately 11 years after loan effectiveness. Target dates for Project implementation, as defined at appraisal and the actual (PCR), are presented in Table 1.

Table 1: Implementation Schedule: Appraisal versus Actual

No	Description	Implementation Schedule	
		Planned (Appraisal)	Actual (PCR)
1.	Loan Approval	January 1992	27 th January 1992
2.	Loan Signature	June 1992	1 st December 1992
3.	Date of Entry into Force	<i>Not Indicated</i>	12 th July 1994
4.	Establishment of Steering Committee	September 1992	May 1992
5.	(Recruitment) Nomination of PMU Staff		
	National Project Manager	October 1992	July 1993
	Abattoir Manager (Acting)/Civil Engineer	October 1992	April 1995
	Senior Stock Route Supervisor (and Marketing Officer)	October 1992	July 1993
	Senior Marketing Information Supervisor	October 1992	July 1993
	Procurement and Finance Officer	October 1992	July 1993
	Project Civil Engineer	NA	April 1995
6.	Loan Effectiveness	December 1992	12 th July 1994
7.	Starting Date of Project Implementation (Field Activities)	<i>1st December 1992</i>	July 1997
8.	Recruitment of Technical Assistance		
	Senior Livestock Marketing Adviser (Chief Technical Adviser)	October 1992	17 th July 1994
	Abattoir Operations Specialist	October 1992	22 nd February 2004
	Meat Technologist	October 1992	6 th May 1997 & 22 nd Feb 2004
9.	Studies and Surveys (start)	June 1993	July 1994
10.	Detailed Design, Specifications and Bid Documents for Abattoir	October 1993	March 2001
11.	Detailed Design, Specifications and Bid Documents for Market, and Other Infrastructure	October 1993	April 1995
12.	Initiate Construction/Rehabilitation	January 1994	July 1997
13.	Date of First Disbursement	<i>Not Indicated</i>	5 th August 1994
14.	Date of Final/Last Disbursement	31 st December 1998	31 st December 2005
15.	Project Completion	December 1997	31 st December 2005

3.4 Reporting

3.4.1 According to the Borrower's records, which were verified by the Mission, PMU submitted to the Bank 37 quarterly progress reports, 2 bi-annual progress reports and 1 annual report. An independent external auditor, A.I. Khatri & Co, prepared 10 annual audit reports (AAR) which were also submitted to the Bank, by the PMU. However, the 11th audit report covering the year ending 30th June 2005 was being finalised at the time the PCR Mission was in the country. In all the AARs, the auditor's opinion was unqualified.

3.4.2 The mid-term review was not stipulated in the appraisal report and was not conducted by either the Borrower or the Bank. The Borrower submitted a PCR, to the Bank, in June 2005, which provided a basis for the PCR mission's discussions. The Bank supervision missions' reports/aide memoires assisted in monitoring and evaluating the project implementation progress. Some project-related studies were conducted by Danagro/Scanagri's short-term consultants such as reports #3 and #14, in Annex 7.

3.5 Procurement

Procurement of goods, works and services was done in accordance with the provision of the Bank rules of procedure. According to the Borrower's PCR, the modification (i) para. 3.2.1, for civil works took almost 36 months for a "no objection" to be granted. A summary of major items which

were procured, with respect to the procurement mode recommended in the appraisal report versus actual, is given in Table 2. The list of Contractors, Consultants and Suppliers is given in the Basic Project Data Sheet, Sections F and G.

Table 2: Summary of Items in Project Procurement List

No	Item Description	Mode of Procurement	
		Appraisal ⁶	Actual
1	Office Supplies	Local Shopping	National Shopping
2	Veterinary Drugs and Supplies	International Competitive Bidding	National Shopping
3	Office Equipment and Radio communication equipment	Not Indicated	Direct Purchase and National Shopping
4	Marketing Equipment	International Competitive Bidding	National Shopping
5	Vehicles	International Competitive Bidding	Direct Purchase (IAPSO)
6	Farm Machinery & Implements	International Competitive Bidding	Limited International Competition
7	Turnkey Construction and Equipment Supply of Dodoma Abattoir and the Meat Industry Training Centre	International Competitive Bidding	International Competitive Bidding
8	Construction and Rehabilitation of Markets	Local Competition	Force Account and National Competitive Bidding [para 3.2.1]
9	Design and Supervision of Abattoir and Meat Industry Training Centre	Local Competition	Shortlisting
10	External Training (Study Tours)	International Shopping	International Shopping
11	Technical Assistance	Limited Competition (Shortlist)	Shortlisting
12	Boreholes and Well Infrastructure	Force Account	Force Account
13	Water and Electrical Connections of Dodoma Abattoir	Force Account	Force Account
14	Water Pump and Veterinary Equipment	International Competitive Bidding	National Competitive Bidding [para 3.2.1]

3.6 Sources of Finance and Disbursement

3.6.1 Sources of Finance: Table 3 shows that the total project cost, including contingencies at the time of appraisal, was UA 10.42 million. The ADF loan provided UA 9.21 million and GoT UA 1.21 million towards financing of the project. There were three revisions of the project List of Goods and Services (LOGS) which were made in April 1995, June 1999 and February 2002, as summarized in Table 4, in order to: (i) meet the cost of Dodoma abattoir construction after high actual costs resulting from contract award; (ii) procure replacement project vehicles; (iii) re-allocate excess funds for cattle wagon bogies rehabilitation; (iv) provide funds for *Institution Support* and *Recurrent Costs* since the period was extended; and (v) accommodate modifications made (ref: para. 3.2.1).

3.6.2 The Government fulfilled its financial commitment to the project, in that, its contribution reached UA 3.50 million (PCR) which represents 29.2% of total cost as opposed to the appraisal estimate of UA 1.21 million (11.6%) due to prolonged implementation period of salary payment for local staff and other operating costs.

Table 3: Project Financing

Source	Appraisal		3 rd Revision		Actual (PCR)		Actual vs Appraisal	
	Amount (UA million)	Percentage (%)	Amount (UA million)	Percentage (%)	Amount (UA million)	Percentage (%)	Deviation (UA million)	Percentage (%)
ADF	9.21	88.4	9.21	78.1	8.49	70.8	(+) 0.72	92.2
GoT	1.21	11.6	2.58	21.9	3.50	29.2	(-) 2.29	289.3
Total	10.42	100	11.79	100	11.99	100	(-) 1.57	115.1

⁶ Some of the procurement modes were changed as per para 3.2.1 whilst others were no longer applicable with respect to the revised Bank Group's Rules of Procedure for Procurement.

Table 4: Revised Project Cost Estimates by Category of Expenditure

ADF Category	Category of Expenditure	Appraisal LOGS (December 1991) TLMP-Revision "A"	1 st Revision (April 1995) TLMP-Revision "B"	2 nd Revision (June 1999) TLMP-Revision "C"	3 rd Revision (February 2002) TLMP-Revision "D"
Works	Civil Works	3,164,735.00	2,597,822.00	3,013,980.00	3,048,057.00
Works	Buildings	434,737.00	434,341.00	788,217.00	906,299.00
Goods	Vehicles	769,999.00	1,098,541.00	957,121.00	938,628.00
Works	Rail Wagons	673,289.00	690,000.00	632,380	358,749.00
Goods	Equipment	593,157.00	560,772.00	1,179,504.00	1,385,049.00
Services	Tech. Assistance	1,541,841.00	1,419,410.00	1,541,841.00	1,668,545.00
Goods	Veterinary Drugs	14,737.00	15,000.00	19,000.00	19,000.00
Services	Training & Tours	67,237.00	409,884.00	152,175.00	183,487.00
OPC	Recurrent Costs	451,315.00	779,202.00	711,664.00	702,706.00
Base Total		7,711,047.00	8,004,972.00	8,995,882.00	9,210,520.00
Unallocated Amount (incl. Contingencies)		1,499,473.00	1,205,548.00	214,638.00	0
TOTAL		9,210,520.00	9,210,520.00	9,210,520.00	9,210,520.00

Source of Data: TLMP Files and PMU Finance Manager's Data-base.

3.6.3 Disbursement: According to Tables 3 and 5, the actual amount disbursed from the ADF loan was UA 8.49 million (92.2%), leaving a loan balance of UA 0.72 million. Disbursements amounting to UA 4.45 million were made under "Direct Payment" to Contractors, Suppliers and Consultants whilst UA 4.04 million was transferred under "Revolving Fund Replenishments" to Project's Special Account. Table 5 gives the status of ADF loan disbursement by categories of expenditure. Details of loan disbursements, including payments, are given in Annex 2. GoT contribution was UA 3.50 million, about 289.3% of estimated contribution at appraisal. A table, of yearly disbursements of ADF loan and GoT contribution, is presented in the Basic Project Data Sheet (Section E).

Table 5: Disbursements of ADF Loan by Category of Expenditure

Categories of Expenditure	Revised Cost (3 rd Revision) (UA)	Actual Amount Disbursed (UA)	Percentage Disbursed	Amount Undisbursed (UA)	
A. Investment Costs					
I. Civil Works (Works)	3,048,057.00	3,182,011.47	104.4	-133,954.47	
II. Buildings (Works)	906,299.00	904,856.56	99.8	1,442.44	
III. Vehicles (Goods)	938,628.00	840,090.60	89.5	98,537.40	
IV. Railways Wagons (Works)	358,749.00	287,643.82	80.2	71,105.18	
V. Equipment (Goods)	1,385,049.00	1,022,866.20	73.9	362,182.80	
VI. Technical Assistance (Services)	1,668,545.00	1,427,929.51	85.0	240,615.49	
VII. Veterinary Drugs (Goods)	19,000.00	0	0	19,000.00	
VIII. Training Study Tours (Services)	183,487.00	119,567.96	65.2	63,919.04	
Sub-total of Investment Costs	8,507,814.00	7,784,966.12	91.5	722,847.88	
B. Recurrent Costs					
IX. Recurrent Costs (OPC)					
	Livestock Marketing Infrastructure	127,866.00	340,077.60	266.0	-212,211.60
	Dodoma Abattoir	20,000.00	0	0	20,000.00
	Institutional Support	302,547.00	282,687.06	93.4	19,859.94
	MITC	14,772.00	0	0	14,772.00
	Training & PMU	237,521.00	86,334.00	36.4	151,187.00
Sub-Total of Recurrent Costs	702,706.00	709,098.66	100.9	-6,392.66	
Total (A + B)	9,210,520.00	8,494,064.78	92.2	716,455.22	
Unallocated Amount (incl. Contingencies)		0	0	0	0
Grand Total		9,210,520.00	8,494,064.78	92.2	716,455.22

Source of Data: TLMP Files and PMU Finance Manager's Data-base.

4. PROJECT PERFORMANCE AND RESULTS

4.1 Overall Assessment

The overall performance of the project was satisfactory as almost all planned physical targets were achieved. In spite of the delay, the project achieved physical rehabilitation and construction of almost all planned marketing infrastructure and associated works. Marketing services and infrastructure have been strengthened and are operational, and have impacted positively on the cattle off-take rate, which has increased to around 10%⁷ as compared to 9.8% that prevailed in 1991. The improvement in railway and trucking transportation, through the rehabilitation of cattle wagon bogies and railway sidings (loading/unloading ramps), have all contributed to the percentage increase of animals transported. It was reported, by TLMP, that this has led to reduction in weight loss rate, from 12% to 10%⁸, of animals transported to secondary and terminal markets. The mortality rate of animals sold in secondary and terminal markets has decreased to 0.2%⁹, as compared to appraisal target of 3%. With the modern Dodoma abattoir, consumers are assured of a regular supply of clean and wholesome meat from animals slaughtered under hygienic conditions monitored by the meat inspector. MITC is well equipped and able to provide continuous vocational training for meat industry workers in order to upgrade their skills. The project has partially achieved the immediate objective of increasing the volume of wholesale meat available for local and export market, and is likely to be fully realized in future through continuous and good maintenance of the livestock marketing services and infrastructure, and continuous provision of institutional support.

4.2 Operating Results

4.2.1 The major operational activities of the project were: (i) Strengthening of Livestock Marketing Services and Infrastructure; (ii) Construction of a Modern Abattoir in Dodoma City; and (iii) Institutional Support. The project physical achievements are summarized in Annex 9 and the operational performance, by component, was as follows:

4.2.2 Strengthening of Livestock Marketing Services and Infrastructure: By the end of 1997, very little had been achieved in the rehabilitation/construction of 90 night camps, 15 check points, 13 holding grounds and 56 markets. Delays were mainly caused by the unsuitable modes of procurement for minor civil works. According to the appraisal, construction and rehabilitation of all project-related livestock markets and other infrastructure were supposed to be procured through NCB, a procedure which did not fit easily into the nature of works to be tendered. From July 1994 to June 1996, the Executing Agency, having spent so much time on surveys, preparation of Bills of Quantities and detailed planning for the construction and rehabilitation of all structures including minor civil works, tried several times to invite interested bidders through NCB. Unfortunately, most of these structures did not attract any offer from the potential bidders owing to their remoteness, low value and being widely scattered in nature. Thus, in May 1997, the Bank approved the Borrower's request to rehabilitate the minor works under Force Account, while the major ones could still be tendered under NCB. The sites which were tendered out are Pugu and Weru-weru markets/holding grounds rehabilitated by Rukwa Building Contractors Limited, and Korogwe market/holding ground rehabilitated by K's Builders Limited.

4.2.3 The stock route target was revised from 3,000 km to 1,200 km (April 1995) since it was not included in the Detailed Cost Tables (DCT). However, under the *Presidential Circular No. 1 of 2002*, the Government issued a new policy, which among others, directed that all livestock traders should discontinue trekking their livestock along the main roads and railway lines, and instead the

⁷ Source: "Annual Production Statistics"; Department of Animal Production, Ministry of Water and Livestock Development, Dar-es-salaam, 2004

⁸ Source: "Cattle-Live-weight" Study Report (Annex 7).

⁹ Source: "Annual Report – Pugu Market Data", Tanzania Livestock Marketing Project

animals be transported by rails and trucks. The purpose of the *Circular* was to curb on the spread of contagious livestock diseases and reduce accidents along the major roads. Thus, only 940 km were finally cleared/constructed. However, because of this new policy, TLMP was obliged to construct loading/unloading ramps for trucks in markets which were previously receiving animals by trekking.

4.2.4 The railway sidings were revised (April 1995) from 45 to 10 since the DCT had financial provision for only 10. TRC, under Force Account, constructed 9 out of 10 sidings. TRC has not completed construction of 10th siding at Kizota, near Dodoma abattoir, which has only got railway-siding foundation and loose rails. Initial materials were stolen/vandalised and TRC halted the construction activities. TRC would complete the siding after the abattoir has been privatized and security is guaranteed through a patrol team. To cater for the shortfall in TRC cwbs, the project funded rehabilitation of 60 cwbs without inclusion of emergency water supplies, as per para. 3.2.1 (iii). The cwbs were reduced from 98 since the DCT had only a provision of 60. Construction of cattle wagon washing facility, near each target siding, as proposed at appraisal, was not possible due to lack of space since each station has only 30m x 30m space. Above that, cattle wagons are normally cleaned at central stations, like Dar-es-salaam workshop, where they also undergo routine inspection and maintenance before certification.

4.2.5 The sub-component included establishment of a revolving fund for the supply of essential veterinary drugs, equipment and extension services. However, it was not implemented owing to, first, it would be a duplication of services rendered by other Government institutions, secondly, TLMP did not have the technical machinery to administer it. The table below compares what was achieved to what was planned.

Item	Planned Target (1991)	Revised Target (1995)	Achieved (2005)	Percentage achieved (%)	Mode of Procurement	
					Force Account	Contracted Out under NCB
Night Camps	90	90	90	100	90	0
Check Points	15	15	15	100	15	0
Holding Grounds	13	13	13	100	10	3
Markets	56	56	56	100	53	3
Stock Routes	3000 km	1200 km	940 km	78	940 km	0
Railway Sidings	45	10	9	90	9 (TRC)	0
Railway Cattle Wagon Bogies	98	60	60	100	60 (TRC)	0

4.2.6 The list of rehabilitated/constructed marketing infrastructures, cattle wagon bogies and railway sidings is in Annex 10. The project design made a provision for privatisation of the infrastructures, soon after construction/rehabilitation, under lease agreement. However, tenders for the TLMP's rehabilitated/constructed markets, night camps, check points and holding grounds have not been floated since almost all of them have not yet been surveyed (cadastral survey), registered and issued with title deeds, which is a prerequisite to privatisation. GoT plans to carry out cadastral survey on all TLMP's rehabilitated/constructed marketing infrastructure which would be followed by processing of the title deeds and individual privatisation.

4.2.7 Construction of a Modern Abattoir in Dodoma City: This component suffered long protracted delays due to the following reasons:

(i) **Reliable Water Supply to the Abattoir:** According to the original implementation schedule, the construction of the Dodoma abattoir should have started in the second half of PY2 and be completed towards the end of PY3. Unfortunately, the project management could not start the abattoir construction works until reliable water supply was confirmed, since it was stipulated as a pre-condition. Unfortunately, connection to the municipal water supply was not possible since it was not functioning. Regarding drilling and equipping of an independent borehole, between 1995 and 1996, TLMP facilitated several hydrogeological investigations (borehole siting) and drilled 6 pilot boreholes whose average yields were low and considered as dry-wells. Further investigations, in

1997, located a source of ground water within the vicinity of the abattoir site but the borehole yield was 23 m³/hour and not acceptable to the project. It was not until July 2000 that a reliable and successful borehole was drilled, about 1 km from the abattoir, with a yield of between 65 to 75 m³/hour which was developed and supplies a series of in-line reservoirs leading to the abattoir.

(ii) **Abattoir Design and Recruitment of a Consulting Engineer:** On 18th March 1998, the Bank approved the award of consultancy contract to Tanzania Industrial Studies and Consulting Organization (TISCO) in association with Meateng (RSA) and Africon (RSA) to assist with the turnkey contract for the basic design, tendering and evaluation, supervision of the construction, installation of equipment and machinery, and commissioning of the abattoir and MITC. Although the contract award was approved in March 1998, and signed in November 1998, the consortium experienced difficulty in obtaining the guarantee in Tanzania after their originally submitted guarantee was not acceptable as it was drawn on a South African bank and did not cover all the parties (covered only Africon). Consequently, the consortium waived the 20% advance payment requirement, and did not start work until 1st February 1999. The abattoir's designs were not completed until March 2001.

(iii) **Environmental Impact Assessment (EIA) Study:** Although the Bank had not originally required an EIA to be carried out prior to the commencement of the project, TLMP commissioned an EIA study of the abattoir area and marketing infrastructure to be carried out in order to facilitate and expedite finalisation of the abattoir-design work. M/s JSB Envidep Ltd conducted the study and was not finalised until December 2002. Their EIA study draft report was further reviewed by M/s Deloitte Touche Tohmatsu Emerging Markets (DTTEM) of Canada in February 2003, a process which contributed to further implementation delays.

4.2.8 The Dodoma abattoir was constructed by a Contractor: China Geo Engineering Corporation, under a turnkey contract, signed on 3rd July 2002, which included civil works, supply and installation of equipment and machinery. The contractor was supervised by TISCO. Major civil works' aspects of the abattoir, including the solid perimeter wall fence, have been completed except the incinerator. The original design of the incinerator entailed the use of firewood and TLMP, with respect to the Environmental Management Plan, plans to construct a modern electrical-incinerator. As an interim measure, the abattoir is using sealed disposal pit for condemned carcasses and associated items. All necessary abattoir equipment and machinery have been installed and are functioning, except for the stunning device which requires replacement. The abattoir and independent borehole pump have been connected to the national electricity grid. An independent stand-by generator has also been installed within the abattoir complex.

4.2.9 The abattoir contractual activities were completed on 2nd August 2004. The abattoir was handed-over by the Contractor to the Client on the same day which marked the beginning of a one-year defects liability period (DLP). However, due to various reasons and delays by Government, "Tests after Completion" and commissioning took place from 24th to 29th June 2005. According to TISCO's "Final Report for Commissioning of the Abattoir", the Contractor rectified the identified defects by 25th October 2005 and the DLP has since expired. The Contractor has since been paid off with the Borrower deducting TZS 10 million, from the retention fees, for rectifying minor defects including replacement of stunning device.

4.2.10 Dodoma abattoir operations commenced on 20th March 2005. By 18th January 2006, the time the Mission visited the abattoir, the latter had slaughtered 21,031 cattle (21,600 cattle planned), with the highest being 190 and lowest 46 per single-8-hour-daily shift. However, only 1,448 shoat (goats and sheep), as opposed to 66,000 shoats, have been slaughtered during the same period. The production line system has minimal mechanisation since most activities are done manually except for brisket and carcass splitting which is done with electric splitting saw. Proper tagging is done on all animal parts for ease of identification. The slaughter process promotes national standards of meat

hygiene to be achieved with inspections carried out on each animal. Condemned carcasses and parts are disposed off in a sealed disposal pit. The slaughter fee (2005) is TZS 10,000 for cattle (and the owner gets back the animal's fifth quarter) out of which TZS 1,500 is for the municipality in contrast to the fee of TZS 20,000 per cattle plus the fifth quarter which was proposed in Danagro's "The Business Plan for Dodoma Abattoir" (ref: Annex 7, #14). Tender for privatisation of the abattoir was floated on 22nd October 2004, only one bidder expressed interest, but privatisation has not been concluded since the interested Bidder pulled out, in February 2006, due to delays by GoT.

4.2.11 Major outstanding works, also included in the ESMP, are: (i) linking the abattoir to the existing Dodoma water reticulation system though there is an independent system in place; (ii) connecting the abattoir to the existing Dodoma sewerage system; (iii) construction of a sealed access road connecting the abattoir to the Dodoma-Singida (Bahi) road since the current earthen-road is in poor condition; (iv) provision of paintwork to exterior walls since the initial layer peeled off due to poor bondage; and (v) landscaping around the abattoir.

4.2.12 Institutional Support: MITC, like Dodoma abattoir, was constructed by China Geo Engineering Corporation, under a turnkey contract (3rd July 2002) and was also supervised by TISCO. All major civil works aspects were completed by 2nd August 2004 and all necessary equipment and machinery have been installed and are functioning satisfactorily well except for the stunning device. MITC has been connected to the national electricity grid, and Dodoma city's water and sewerage reticulation systems. However, the MITC was constructed near VETA as per para. 3.2.1(ii), which entailed omission of lecture room, teachers' offices, administration offices and lunch room from the MITC.

4.2.13 **Training**: As per details from PMU, senior TLMP staff attended overseas short-term courses in: Monitoring & Evaluation (3 months, UK), Waste Water Treatment (3 months, Netherlands), Environmental Impact Assessment (3 months, UK), Financial Accounting (1 month, Swaziland), Project Analysis (1 month, Swaziland), Procurement (1 month, Swaziland) and Project Financial Management (1 month, Swaziland). Several in-service training sessions were provided for project staff in the areas of logical framework analysis, computer skills, tractor and motor-vehicle operation and maintenance. Fifty project staff, 29 men and 21 women, underwent local training in abattoir management and related activities at MITC, para. 2.4.5. Two regional study tours were conducted for two groups of 15 senior staff members to South Africa, Namibia and Zimbabwe in order to appreciate implementation style of similar project-activities.

4.2.14 **Marketing Information Service**: in order to strengthen the marketing information service, the secondary markets were provided with facilities like weighing scale, auction rings and cattle holding pens for sellers and buyers. It was expected that the animal offered for sale would be weighed, graded, auctioned, and appropriate data compiled for future use. The generated data would be communicated through project's radio network between different markets and head office of TLMP. However, despite rehabilitating the infrastructure, in almost all markets which were visited, the weighing scales and auction rings were not being used. The sellers' pens were also not being used in some secondary markets whilst in some markets the sellers' pens were used for keeping animals overnight and not for purpose of auctioning process. Random interviews, carried out by the Mission, revealed that the "open/auction system" was mainly opposed to by buyers/sellers on grounds of security risks especially when many animals are traded on the same day, on cash basis, and there is no banking facility within the market areas. Most traders fear that they might be mugged after the auctioning process, and hence preferred the traditional "closed" selling system whereby a buyer privately and secretly negotiates the price of animal(s) and finalises the deal with the seller.

4.2.15 A network consisting of 2 mobile and 10 station-based radios was provided to the project to enable different stations/holding grounds/markets keep contact for advance notice of stock movement and marketing intelligence. However, the radio network is not functioning properly in

some stations/markets, and the Supplier is reluctant to rectify the defects which were identified by the Borrower. The Supplier's final payment, of US\$ 4,800.00, is being withheld by TLMP pending issuance of "Certificate of Acceptance".

4.2.16 Computers have been procured, by TLMP, and distributed to critical centres. An efficient system for data collection and market intelligence/information service is still being established by the Government, which when completed, would primarily benefit the livestock producers, sellers and buyers. The Government plans to use local radios, local newspapers and mobile phones for data dissemination. A computerised Tanzania Livestock Marketing Information System (TLMIS) has been developed by the University of Dar-es-salaam's Computing Centre and TLMP staff members have been trained in its management. TLMIS has two distinct components comprising web-based marketing information system dealing with prices at all participating markets and local non-web-based database system for use by district and regional officers in data generation. TLMIS website is <http://www.livestockinfo.go.tz> though most of the necessary links are still under construction. The Borrower will finalise construction of TLMIS, after training the Revenue Collectors, and procurement of office equipment like computers and telephones for the target markets/centres.

4.2.17 **Project Management:** The project was implemented by an independent decision-making Project Management Unit (PMU) headed by a National Project Manager, and included the Senior Livestock Marketing Adviser (Team Leader), Abattoir Specialist, Meat Technologist, Senior Stock Route Supervisor, Senior Marketing Information Supervisor, Civil Engineer, Assistant Civil Engineer, Senior Livestock Officer, and Procurement/Finance Officer. The recruitment period for senior PMU staff increased from 276 to 1,006 person-months whilst for general support staff decreased from 2,736 to 1,186 person-months. All vehicles, equipment and furniture which were proposed in the appraisal report and revised in the LOGS were procured.

4.2.18 Technical assistance was provided mainly by Danagro Advisor a/s (Scanagri Denmark a/s) which signed the contract on 12th July 1994 spanning up to October 2004 (amended) but has still not been terminated due to unsettled balance of US\$ 88,692.40. Danagro's long term personnel included Chief Technical Adviser, Meat Technologist, Abattoir Operations Specialist whose collective person-months reduced from 108 to 100. Short-term experts included Finance and Procurement Officer, Systems Analyst, Vocational Training Expert, External Auditor, Abattoir Design Engineer, Veterinarian, Range Management Specialist, Corporate Business Advisor, Women in Development Specialist and Market Demand Survey Specialist with a total person months of 14.5 as opposed to the planned 49 due to escalation in associated costs. The TAs and other consultants developed local capacity by providing on-the-job training to counterpart staff.

4.2.19 Other consultants, TISCO, in collaboration with Meateng (RSA) and Africon (RSA), recruited on 9th November 1998, provided technical personnel to design the abattoir and MITC. TISCO personnel also supervised the construction of abattoir and MITC whose contract was supposed to end on 29th June 2004 but has not been finalised. The final certificate for TISCO (US\$ 9,800.00) has not been settled by the Project, due to reasons which were communicated to the Bank by the Borrower, (*Letter Ref: No. WMM/TLMP/T.80/NL.XII/, dated 22nd December 2005*), although the revised date of last disbursement has since expired. Consultants JSB Envidep Ltd and DTTEM were recruited as per para. 4.2.6(iii).

4.3 Management and Organisation Performance

4.3.1 TLMP Organization and Location: The project was implemented through the existing structures of its executing agency, the Ministry of Agriculture, Livestock Development and Cooperatives (MALDC). The Commissioner for Planning and Marketing had overall supervisory responsibility for the project. Although PMU had an independent decision-making right, it operated under the Marketing Development Bureau (MDB) and reported directly to the Assistant

Commissioner for MDB (*currently Ministry of Livestock Development*). Most of the PMU staff positions, para. 4.2.17, as provided for in the appraisal report or revised, were filled up by end of 1995. However, TLMP management lacked its regular presence in the project implementation areas as it operated from the offices in Dar-es-salaam, consequently did not promote proper facilitation of its day-to-day management functions, and monitoring process. Since field activities were being implemented through the regional livestock development offices, most often, decisions on the use and allocation of project funds and other resources would be referred to the project headquarters in Dar-es-salaam. Thus, valuable time was wasted before right decisions would be taken and communicated back to the various regions.

4.3.2 Staff Retention, Motivation and Training: The project management team has been relatively stable and highly motivated since 1993. All key personnel have also been stable with only four resignations since the commencement of the project. The project has had three consecutive Finance Managers, the first one was recruited in July 1993 and resigned in October 1996, and the second one stayed from November 1996 to March 2000, while the third one has been with the project since August 1999. The procurement officer was recruited in July 1993 and resigned in September 1996. All resignations were done as a result of getting better financial packages/offers from other firms. The senior stock route supervisor resigned from the project in June 2004 to pursue further studies, and his position has not yet been filled. The high staff retention rate has been due to the various types of built-in incentives, mainly in the form of field, transport, housing allowances and per diem. According to TLMP records, senior TLMP staff attended training courses as per para. 4.2.13.

4.3.3 Project Steering Committee (PSC): The PSC played its role effectively as envisaged in the appraisal report, namely, to review and guide project implementation, review and approve project budgets and work programmes, and advising the project on policy-related issues. According to TLMP records, 33 PSC meetings were convened. However, since the PSC was not a technical body, it was not in a position to review the civil works and building designs.

4.4 Performance of Consultants, Suppliers and Contractors

4.4.1 Technical Assistance (TA): Danagro (Scanagri) performance was satisfactory. The TA fielded the required number of qualified long and short-term consultants who performed their activities to the required standard. The TA assisted the PMU in project implementation activities, especially in the areas of physical rehabilitation/construction of marketing infrastructure. TA also carried out several studies and produced reports including “*The Business Plan for Dodoma Abattoir*” and “*Strategies to Enhance the Participation of Women in the Livestock and Meat Marketing Chain*”. The consultant, together with PMU staff, prepared and submitted Quarterly Progress Reports to the Bank. Danagro recruited A.I. Khatri, an independent auditor, who prepared Annual Audit Reports. It is worth noting that the TA laid a good foundation for sustainability of project infrastructures which are still functional.

4.4.2 Performance of Other Consultants: TISCO, Meatang and Africon consortium’s performance and quality of the design work was technically satisfactory. After the design phase, TISCO supervised construction activities of Dodoma abattoir and MITC. However, TISCO’s supervisory quality was not satisfactory since the frequencies of site visits were on quarterly basis instead of weekly (Resident/site Engineers) and, above that, the technical personnel who were fielded were not well qualified. The PCR mission was not able to meet TISCO’s manager since he did not respond to two appointment requests. **JSB Envidep Ltd and DTTEM** separately performed well in the production of the EIA study reports with associated ESMP and EMP. A list of consultants is shown in Section G of the Basic Project Data Sheet.

4.4.3 Performance of Suppliers: Most suppliers performed satisfactorily. They supplied good quality products and delivered them within a reasonable time. Most of the Suppliers were in good relationship with the PMU. The only exception is the supplier of 12 radio communication units (International Communications System Ltd) who supplied radio sets some of which were not acceptable to the Borrower. A list of suppliers is shown in Basic Project Data Sheet, Section F.

4.4.4 Performance of Contractors: Performance of contractors (Rukwa and K's) was satisfactory and they timely rehabilitated the marketing infrastructures according to schedule. However, for the construction of the Dodoma abattoir and MITC (China Geo), there was a slippage in time of seven months due to delays in shipping abattoir equipment and machinery. All contractors had good relationship with the PMU and their quality of management and financial soundness was good. A list of contractors is shown in Section F of the Basic Project Data Sheet.

4.5 **Fulfilment of Loan Conditions and Covenants**

4.5.1 Conditions Precedent to Entry into Force: The effectiveness of the loan agreement was subject to fulfilment by the Borrower of the following conditions:

- i. set up a steering committee whose composition, functions and responsibilities shall be satisfactory to the Fund;
- ii. set up an independent, decision-making Project Management Unit, whose composition and CV's of key personnel shall be acceptable to the Fund;
- iii. appoint a National Project Manager whose curriculum vitae shall be acceptable to the fund;
- iv. undertake to revise annually livestock movement permit fees in order to ensure that they keep up with cost increases;
- v. undertake to let out to private sector management, the rehabilitated/constructed markets and stock routes.

4.5.2 There were too many and impractical loan conditions which were difficult to be fulfilled by the Borrower, as a result of which there was a delay in loan effectiveness and also project implementation (ref. Annex 8). The loan became effective on 12th July 1994.

4.5.3 Other conditions: In addition to the above Conditions, the Borrower was required to fulfil six other conditions as follows:

- i. cause MALDC within a period of 6 months after entry into force of this loan agreement, to appoint the requisite number of local staff needed to maintain and implement project activities;
- ii. cause the vocational meat training programme of MALDC to be included in the training curricula of the Ministry of Labour and Youth Development;
- iii. cause MALDC to review, within a period of one year after entry into force of this loan agreement, quarantine regulations for animals using stock routes;
- iv. ensure that the revenues collected from livestock markets and movement permit fees continue to be used by the project to cover recurrent costs for maintaining these facilities, on a revolving fund basis;
- v. take all necessary actions to ensure the implementation of the Food (Control of Quality) Act in Dodoma City, once the new abattoir becomes operational;

- vi. cause MALDC within Project year two to draw up procedures for letting out the management of the Dodoma abattoir to the private sector.

4.6 Economic Performance

4.6.1 Economic viability of the project has been assessed by recalculating the Economic Internal Rate of Return (EIRR). In recalculating the EIRR, a different methodology from the one used at appraisal has been adopted as a proxy because of the following reasons. There were no systematic recorded annual data on the parameters which were used during appraisal to estimate the incremental number of animals gained as a result of reduction in body weight loss rate and reduction in mortality rate due to improved transportation system of animals by the rehabilitated TRC wagons and by trekking through the rehabilitated stock routes in the entire project area (ref. para. 4.2.14). In absence of such data, incremental benefits from trains and stock routes could not be derived. Consequently, incremental benefits were derived by using the market, movement permit and cattle wagon fees charged.

4.6.2 The project incremental costs and benefits have been considered for a period of 20 years. The costs include the direct investment costs of the Strengthening of Livestock Marketing Services and Infrastructure component (100%), 75% of the investment costs of Project Management and Training, and 50% costs of Technical Assistance. 75% of the total investment cost on the Project Management and Training was considered justified as the marketing infrastructure was initiated much earlier than Dodoma Abattoir and MITC. 50% of the investment on Technical Assistance was considered justified as the services of long-term technical assistants and short-term consultants were considered equally divided between Marketing Infrastructure, on one hand, and Dodoma Abattoir/MITC, on the other hand. Recurrent costs included operations and maintenance (O&M) for the Marketing Infrastructure, PMU office, allowances for PMU staff, vehicles and equipment, and railway wagons. The revenues accruing to the project include: (i) market fees for animals sold in the secondary markets, (ii) the movement permit fees charged for the movement of animals, and (iii) transportation fees per wagon charged by TRC.

4.6.3 A standard conversion factor of 1 has been assumed for the analysis, since foreign currency is traded freely in the country and as such does not carry any premium. Price contingencies, taxes as well as government direct subsidies have been removed from the analysis.

4.6.4 EIRR calculated over the period of 20 years, is 8%, without export, as compared to 10% calculated at appraisal (ref. Annex 3). The reasons attributable to the fall in EIRR to 8% are mainly due to the fact that the movement permit and the secondary market fees, which contribute to the revenues of the project, are conservatively set by GoT and they are not annually revised to levels commensurate with the cost increases. It is expected, however, that when marketing infrastructure are privatized, the movement permit and the secondary market fees will be market or commercially determined, hence, reflecting their economic value for which the consumer is willing to pay.

4.6.5 Although no attempt has been made to calculate the EIRR for the Dodoma abattoir, the benefits for a regular supply of clean, wholesome meat to consumers in the country, from animals slaughtered under sanitary conditions cannot be over-estimated. The abattoir supplies hygienic meat to inhabitants of Dodoma city and to the rest of the country, and it now serves as a model for future similar developments elsewhere in the country, and the displacement of the old unhygienic abattoir was imperative as it had started to adversely affect the surrounding environment.

5. SOCIAL AND ENVIRONMENTAL IMPACT

5.1 Social Impact

5.1.1 Impact on Poverty Reduction and Rural Development: Although no study has been done, general observation indicates that the project has contributed to some elements of poverty reduction and strengthening marketing efficiency, which has led to employment and income generating activities in the vicinity of primary and secondary markets and along stock routes for vulnerable groups, particularly women and youths. This group, normally, manages temporary booths for food, drinks, agricultural produce and factory merchandise of low value during market days and rotate from one market to another each week. Villages adjacent to stock routes serve as temporary overnight holding grounds, with rough holding paddocks, which have created basic economic activities caused by regular influx of drovers to rest areas. This has had a significant positive impact on the lives of the local community as their quality of life has improved. It was reported, by TLMP, that income of livestock producers in the rural areas has increased as prices have remained stable even during harsh weather conditions. Although it is difficult to quantify the exact amount of income realized from this informal trade, the rehabilitation of the markets has increased the incomes of farmers and middlemen as marketing infrastructures are easily accessible. In terms of truck owners, though not quantified, there are good returns on the trucks which load animals since with good rehabilitated road network, the livestock owners prefer them for fast delivery. This has generated revenue for and good returns to the truck owners who can use the financial resources for household use. The TLMP activities have made great input to rural infrastructure development efforts within the project catchment areas.

5.1.2 Regulations: Some of the regulations which have been set by the project are designed to: prevent and contain contagious diseases both amongst livestock and human population; formalise livestock trade; reinforce security measures; minimise negative environmental impacts; maintain an equitable relationship between producers, consumers, and intermediaries; and allow for the collection of revenue to sustain the public infrastructure. These regulations will be fully effective if the ESMP activities are carried out.

5.1.3 Availability of Meat: Marketing services and infrastructure have been strengthened and are operational, and have impacted positively on the cattle off-take rate, which has slightly increased to around 10% as compared to 9.8%. The improvement in railway and trucking transportation, through the rehabilitation of cwbs, sidings and loading/unloading ramps, has all contributed to the percentage increase of animals transported and distributed to many districts. This has led to reduction in weight loss rate and mortality rate of animals transported. Due to the modern Dodoma abattoir, consumers are assured of regular supply of clean and wholesome meat slaughtered under hygienic conditions.

5.1.4 Community Impact: According to TLMP, the project impact, since its inception, has been in line with the increase in the number of rehabilitated primary, boarder and secondary markets. At inception, the project inherited only four secondary markets with poor livestock infrastructure accompanied with high insecurity due to theft of livestock. The number of markets with high security due to constructed livestock infrastructure (permanent perimeter walls and holding pens), have been increased from 4 to 56, which act as a catalyst in creating an efficient marketing chain from the producer to the consumer and are well distributed in the 12 regions that constitute the main catchment areas of the livestock markets. To intensify on security, the project set up police posts at large markets or co-opts the police force during markets days. According to the Borrower's PCR, the number of livestock traded and people employed at informal trade at primary, boarder and

secondary markets has increased by 68% and 175%, respectively. The informal traders attending the rehabilitated markets are estimated at 20,000 as compared to 7,200 at inception. The reason for the sharp increase has been attributed to the increase in security, market information and a strategic location of the markets throughout the Project area, which comprises over 75% of the total livestock population in the country. Several NGOs have been conducting basic education in community health, income generation, awareness and prevention of HIV/AIDS pandemic.

5.1.5 Gender: An increase in the number of livestock traded has resulted into social spill over effects in the rehabilitated markets. As per the “*Strategies to Enhance the Participation of Women in the Livestock and Meat Marketing Chain*”(ref: Annex 7, #3), the informal trade, within the markets, is dominated by women (about 85%) who sell poultry, vegetable, fruits, grains, cooked food and drinks. Some of the women set-up their micro-enterprise by having access to small credit funds provided by NGOs and are able to timely pay back their loans thus preserving self-esteem and respect. The remaining 15% are men and youth who trade in factory manufactured commodities of low and affordable values. Women were also observed selling hay (for cattle) and traditional carvings at Meserani market. It was reported that small ruminants (goats and sheep) are normally traded by women in most markets whilst they only constitute 4% of the cattle traders, an activity which, in Tanzania, is traditionally dominated by men. The report also indicates that 2% of butchereries are being managed by women meat traders who fully adhere to Government regulations since they are conscious of health problems. With respect to the Government staff, as per para. 4.2.13, out of 21 women who were trained at MITC, 13 are skilled workers at the Dodoma abattoir and 2 are based at MITC.

5.2 Environmental Impact

5.2.1 Since the project activities were not expected to result in any significant negative environmental and social impacts, the project was not classified in any of the Bank’s environmental Categories which require a full Environment and Social Impact Assessment (ESIA) study to be carried out before commencement of project activities. In addition, the appraisal team did not include the environmental expert. However, owing to the National Environmental Policy (1997), the Government commissioned an EIA study which was initially done, in November/December 2002, by local Consultant JSB Envidep Ltd whose draft EIA Report was reviewed by DTTEM in January/February 2003. Apart from the Dodoma Abattoir, the ToR for DTTEM also included EIA analysis for stock routes, check points, markets, holding grounds and the MITC and production of a detailed Environmental and Social Management Plan (ESMP), an instrument which outlined the mitigation and institutional strengthening measures to prevent or minimise adverse environmental impacts and to enhance beneficial impacts. The ESMP specified how, when and by whom the outlined measures would be implemented. ESMP was beefed up by the Environmental Monitoring Plan (EMP) to ensure environmentally sound operation and management of the facilities. Both consultants were guided by the Environmental Impact Assessment guidelines (African Development Bank and World Bank), the National Environmental Policy (1997), National Environmental Management Act (1993) and the Draft Environmental Impact Assessment Guidelines issued by the National Environment Management Council (NEMC). The NEMC approved the implementation of project activities on condition that the proponent (TLMP) should abide by the proposed activities in the ESMP and EMP. However, during implementation, both the ESMP and EMP were not fully followed due to inadequate funds. TLMP indicated that, efforts to acquire additional funding from the Bank proved futile since the proposed activities’ costs were deemed expensive. However, the Government is in a process of acquiring funds for implementation of recommended major outstanding activities listed in the ESMP and EMP, and also in para. 4.2.11.

5.2.2 At inception of the project, about 50% of livestock were brought to the secondary markets through rail and the rest were trekked on hoof. At project completion, about 90% of all livestock are railed and trucked to the markets, and this has been possible because of the rehabilitation of railway loading sidings (ramps) and the construction of truck loading ramps in markets. This has a positive environmental impact as land degradation along the former trek routes has ceased, above all, soil erosion and accidents caused by trekking livestock along major roads has been reduced. Rehabilitation of key infrastructure in the holding grounds including provision of grazing areas and water has reduced overgrazing and land degradation through controlled grazing pattern.

6. PROJECT SUSTAINABILITY

6.1 Technical Sustainability

6.1.1 Most of the TLMP physical infrastructures, which were achieved during implementation, are still in reasonable condition, though some require minor maintenance. The livestock marketing services and infrastructure have been strengthened and are operational. They have impacted positively on the cattle off-take rate, which has increased to around 10% as compared to 9.8% (1991). The improvement in railway and road (trucking) transportation has all contributed to the percentage increase of animals transported to the markets. This has led to reduction in weight loss rate of animals transported to secondary and terminal markets to about 10%, and mortality rate to 0.2% as compared to 5% (appraisal).

6.1.2 The modern Dodoma abattoir is fully operational and consumers are assured of regular supply of clean and wholesome meat from animals slaughtered under hygienic conditions. MITC is well equipped and able to provide continuous vocational training for meat industry workers. The project immediate objective of increasing the volume of wholesale meat available for local and export market has been partially achieved and is likely to be fully realized in future through continuous and good maintenance of services and infrastructure. TLMP has the required technical capacity to manage the project activities. It has shown commitment and has improved the delivery of the required livestock marketing services. A pilot feedlot has been established at Mtibwa Sugar Company as a gateway for production of quality cattle for Dodoma abattoir. GoT plans to (i) acquire land, from Capital Development Authority, for establishing a Dodoma feedlot and (ii) formalise cattle fattening contracts with farmers in order to feed the Dodoma abattoir with quality cattle. This will enhance the utilisation of the Dodoma abattoir.

6.2 Economic Sustainability

6.2.1 Cost recovery is very essential for project sustainability. It is evident that the sustainability of market infrastructure mainly depends on the beneficiaries, their appreciation of the benefits and their feeling of ownership and responsibility to take care of the livestock infrastructures. The operations of the rehabilitated markets have shown positive impacts not only to producers, but also to traders and, to some extent, to the consumers. According to the Borrower's PCR, livestock producers and traders are willing to pay even higher fees, if the services are improved to the required standard and their availability guaranteed.

6.2.2 Primary markets are concentrated in the main livestock producing areas and are presently under respective District Councils (DCs). However, the revenue collected by Local Authorities (LAs), from these markets, is not ploughed back to sustain them, and instead they are used to pay salaries, office utilities and allowances. Nonetheless, this practice is likely to change as LAs have proposed to gradually start privatising operations of marketing services although ownership of these markets would still remain in the hands of DCs which would allocate budget in the annual programmes for maintenance of the infrastructure. The current policy reforms require the

Government to concentrate its efforts on the provision of core regulatory and technical services including investment in marketing infrastructure comprising stock routes and associated facilities such as holding grounds, veterinary checkpoints, night camps and markets. These functions cannot be performed by the private sector, as there is no direct and clear return on investment.

6.2.3 Secondary markets, the movement permit fees, market fees, holding ground fee, export permits and other charges related to regulatory/quality control in live animals and livestock products (hides and skin) will continue to be collected by the TLMP. TLMP was granted the use of these funds to pay some of its operational expenses and has gained experience in its management. Based on the data available, these revenues are currently sufficient to pay administration and operational costs, maintenance of equipment and vehicles, excluding salaries. However, under current fees regime, the sustainability might be questionable unless if the fees are revised upwards.

6.3 Institutional Sustainability

6.3.1 The Project activities were initiated in July 1994 but actual physical implementation did not start until July 1997. The activities were implemented by the PMU with TA provided by Danagro (Scanagri). The intervention of TA throughout the implementation period laid a strong foundation for the efficient management of TLMP, through the strong training programme that was offered to the TLMP staff (ref: para. 4.2.13). However, towards the end of the project, with sustainability and privatisation in mind, the Government has been keen to privatise the Dodoma abattoir. As of January 2006, there had been only one bidder who had shown interest in acquiring the abattoir. Owing to the long dragging process by the Government, the bidder has since withdrawn his proposal. Privatisation of the rehabilitated/constructed marketing infrastructure is delayed because the required cadastral survey has not yet been carried out to enable acquisition of title deeds.

6.3.2 Meanwhile, the Government is in the process of establishing a Tanzania Livestock Marketing Agency (TLMA), which will mainly absorb the current TLMP staff, with the aim of sustaining the activities and to look into the interests of marketing aspects at local and national level, since there is no established organization that can carry out such functions. TLMP staff have experience, technical skills and knowledge to manage the physical infrastructure and financial issues having worked with various TAs and short-term consultants for more than ten years. In addition, TLMP staff have recently undergone special training, facilitated by a consultant, as a prerequisite before the transformation of the PMU into functional TLMA. TLMA would be a semi-autonomous body, which consequently would bring in new beneficial changes to the project since activities would be managed on commercial basis thus making them more sustainable. Establishment of TLMA and integration of existing TLMP skilled staff would prolong the good foundation for goodwill and commitment which is a strong basis for sustainability.

7. PERFORMANCE OF THE BANK AND THE BORROWER

7.1 Performance of the Bank

7.1.1 Quality at Entry: The project quality at entry was lacking. The project logframe matrix, which should normally define hierarchy of the project objectives, verifiable indicators, source of information and corresponding assumptions, was omitted. The project lacked baseline data for component activities and this caused a problem in monitoring the progress of the project activities as their achievements had nothing to compare them to. Some of the project targets were too high considering that the livestock marketing industry would recover from its dilapidated state.

7.1.2 Some of the Bank conditions prior to entry into force were not practical. For example, one of the conditions required the Borrower to set up an independent, decision-making PMU, whose composition and CVs of key personnel should be acceptable to the Fund. The Bank stipulated that the PMU must include, among others, the senior livestock marketing advisor who together with the abattoir specialist and meat technologist must be internationally recruited staff. This condition alone delayed the declaration of the project effective as the internationally recruited staff were provided by Danagro Adviser, which did not sign the service contract until July 1994.

7.1.3 Project implementation suffered unnecessary delays due to unsuitable modes of procurements which were specified in SAR (ref: para. 3.2.1). According to the original implementation schedule, the construction of the Dodoma abattoir should have started in the 2nd half of PY2 and be completed towards the end of PY3. Unfortunately, the project management could not start the construction works until water availability was confirmed. To avoid these delays, the Bank at the project design stage, as a prerequisite, should have carried out an EIA, surveys of water availability within the proposed abattoir site before the start of the project. Long delays in implementation of the project, resulted in forfeiting project benefits which would have accrued during the earlier years.

7.1.4 Although the Bank had not originally required an EIA to be carried out prior to the commencement of the project, the borrower was later advised to commission an environmental impact assessment study of the abattoir area to be carried out immediately in order to facilitate and expedite the work. M/s JSB Envidep Ltd conducted the study and was not finalised until December 2002. Their EIA study draft report was further reviewed by DTTEM in February 2003, a process which contributed to further delays to TISCO's completion of their design work before they could finalise the tendering process of the abattoir and the MITC.

7.1.5 The other shortcomings, according to the Borrower's PCR, include rigid and slow procurement process in that it took almost 36 months to change the mode of procurement for livestock marketing civil works (from NCB to Force Account), and slow disbursement process, although most of the supervision mission's time was spent on these issues. It was also reported that direct payments, at times, took long to be made to the contractors, suppliers and consultants by the Bank. The Bank did not provide training to Project staff in Bank rules of procurement and disbursement during start-up period.

7.1.6 Bank Missions: The project identification and preparation was done by FAO/IC and the Bank was involved during the appraisal. Both the FAO/IC and Appraisal missions did not include proper skills mix (expertise) for instance an Environmentalist and a Civil Engineer. Although the above shortcomings were overlooked, the Bank performed well during fielding of supervision missions. The Borrower's PCR confirms that the quality of supervision missions was technically good and effective. The missions managed to correct the shortfalls which were made at project design. A total of 22 missions (including 1 appraisal, 2 Portfolio Reviews, 1 Audit mission, and ADB Executive Director's visit) were undertaken over the implementation period and 1 PCR mission resulting into an average of 1.8 supervision missions per annum which compares favourably with the Bank Group recommendation of 1.5 supervisions per year. No mid-term review mission was fielded. In view of the above, the Bank's performance is rated unsatisfactory (Annex 4).

7.2 Performance of the Borrower

7.2.1 Project Delays at Start-up and during Implementation: The project experienced protracted delays at start-up and during its implementation. First of all, TLMP senior staff had to be recruited by the PSC, the project appointing authority, which, itself had, first to be put in place before the recruitment exercise could start. Secondly, the newly recruited senior TLMP staff did not have much experience in the Bank's rules of procedure for procurement of goods, work and services.

Thirdly, one of the loan conditions prior to entry into force required that some of the TLMP's key personnel be internationally recruited and their CVs be acceptable to the Bank. The international key personnel for TLMP were provided by Danagro Advisor a/s (Scanagri Denmark a/s) whose service contract was not signed until July 12, 1994, the date when the loan became effective. Other factors that caused delays during project implementation included: bureaucratic procedures between the Borrower and the Bank Group; unsuitable mode of procurement; non compliance with procurement and disbursement rules and procedures; and submission of incorrect/incomplete disbursement applications. Thus, the project loan suffered a slippage of 24 months or 400% on its effectiveness from its approval date.

7.2.2 Loan Utilisation, Counterpart Funding and Payments of Clients: TLMP was able to utilize UA 8.49 million or 92.2% of the total loan (UA 9.21 million) when the project came to a close on 31st December 2005. However, GoT's actual contribution stood at UA 3.50 million as compared to UA 1.21 million which was planned at appraisal. This was achieved through budgetary allocation and internally generated funds by the Project. The Government's cost overrun was mainly due to operational costs (salaries and allowances for local staff) as a result of a long delayed period of project implementation. In view of total loan utilisation (92.2%), the Government contribution is considered adequate and satisfactory. However, by date of last disbursement (31/12/2005), the project had not been able to pay some national and international clients as all direct payments made through the Bank had not reached the beneficiary clients by 31st December 2005.

7.2.3 In spite of the above mentioned problems which were experienced during the project implementation, MALDC (MoLD)/TLMP and TRC played their roles effectively during project inception, design and implementation. This is exhibited by the Executing Agency commitment and support given to the project despite numerous institutional changes. The Borrower contributed the project's financial requirement without problems although the actual contribution amounted to UA 3.50 million as opposed to UA 1.21 million due to extension of implementation period and high recurrent costs. The Borrower timely submitted to the Bank Project Quarterly Reports (Bi-annual and Annual Reports) and Annual Audit Reports, the Borrower also produced a PCR (ref: Annex 6). According to the Audit reports and TLMP records, the Borrower managed the project funds and other resources prudently as all the project financial resources were deployed to only those authorized and approved uses by the Bank. The project management team has been relatively stable and highly motivated since project inception. All key personnel have also been stable with only three resignations since the commencement of the project (ref. para. 4.3.2). The TA was well utilised, by the Borrower, to start off the project and during implementation. The Borrower's performance is therefore judged satisfactory.

8. OVERALL PERFORMANCE AND RATING

8.1 With respect to the project outcome rating (Annex 4), the overall performance is satisfactory having scored 2.32 since the project has achieved the physical rehabilitation of the livestock marketing infrastructure and construction of the Dodoma abattoir and MITC, and to some extent has partially met the appraisal expectations with respect to the immediate objectives (score 2.43) and sustainability (score 2.37). As regards institutional development the project is judged satisfactory (score 2.5) mainly because there was good interaction between the TA and PMU staff, above that, the PMU had low staff turnover. The re-calculated economic rate of return is satisfactory in view of the current operating environment.

8.2. According to the livestock experts, livestock projects normally take 7 to 10 years for implementation period and not 5 as was designed for TLMP. For future projects, it is recommended that project implementation period should be realistic depending on circumstances.

9. CONCLUSIONS, LESSONS LEARNED AND RECOMMENDATIONS

9.1 Conclusions

9.1.1 The project implementation performance was satisfactory since almost all planned physical targets were achieved, in spite of numerous delays. The project managed to rehabilitate the livestock marketing infrastructure including construction of the modern Dodoma abattoir and Meat Industry Training Centre. The marketing services and infrastructure have been strengthened and are operational which have impacted positively on the cattle off-take rate. Owing to the rehabilitated infrastructure, there is good source of pasture and water for trade stock which has minimised natural-resources-usage conflicts that existed between agro-pastoralists and cattle traders. Part time employment opportunities and income-generating activities have improved within the market areas and stock routes. Improvement in railway and trucking/road transportation, through the rehabilitation of cattle wagon bogies, railway sidings and loading/unloading ramps have contributed to the percentage increase of animals transported to secondary and terminal markets which has led to reduction in weight loss and mortality rate.

9.1.2 With the modern Dodoma abattoir, consumers are assured of a regular supply of clean and wholesome meat from animals slaughtered under hygienic conditions. MITC is well equipped and able to provide continuous vocational training for meat industry workers in order to upgrade their knowledge and skills. Even though the appraisal targets have not been fully met, the project has partially achieved the immediate objective of increasing the volume of wholesale meat available for local market and is likely to be fully realized in future through continuous and good maintenance of the livestock marketing services and infrastructure.

9.1.3 In order to fully sustain the project activities, the Government should privatise the Dodoma abattoir and some livestock marketing infrastructures since continuous involvement in such infrastructures would render them to operate sub-optimally. Under the private sector, the abattoir would catalyse development of cattle feedlots to supply best animals, and establishment of processing companies for meat and associated products to target export markets. The privatisation process would be augmented by the transformation of the Project Management Unit into a functional and semi-autonomous Tanzania Livestock Marketing Agency (TLMA). The Government has already advanced in the creation of TLMA which would work hand-in-hand with the private sector in management of the infrastructures, on commercial basis, and bring about new beneficial changes. The intervention of Technical Assistance throughout the implementation period laid a strong foundation for the creation of TLMA.

9.1.4 The project time overrun is attributed to: delay by the Borrower in fulfilling the loan conditions; Bank's delay in granting "no-objection" for change of procurement mode for civil works; and long procurement and disbursement processes. Despite the time overrun, approximately UA 8.49 million (92%) of the ADF loan amount was disbursed and utilised, leaving a loan balance of about UA 0.72 million (8%). There are outstanding activities needed to fully maximise the benefits of the project. It is proposed that the Government should source funds for implementation of the following activities: (i) implementation of ESMP and EMP activities; (ii) settlement of outstanding claims; (iii) construction of loading/unloading ramps in the existing markets as traders are increasingly using trucks for transporting their animals; (iv) carrying out cadastral survey for all the rehabilitated TLMP markets and holding grounds as a prerequisite for acquisition of title deeds in order to prepare these facilities for privatization, in fulfillment of one of the loan conditions; (v) improvement of the Dodoma incinerator in order to comply with the Environmental Management Plan; (vi) connection of the abattoir complex to the Dodoma municipal's water and sewerage

reticulation systems; (vii) construction of a sealed all-weather access road connecting the abattoir to the Dodoma-Singida road; (viii) completion of the remaining TLMIS web-site links; and (ix) abattoir paintwork and landscaping. The re-calculated EIRR is 8%, without exports, which is robust given that the movement permit and secondary market fees, which contribute to the revenues of the project, are conservatively set by GoT and, on the other hand, the project activities generate important social benefits to the communities.

9.2 Lessons Learned

9.2.1 Livestock marketing infrastructure provides a good opportunity to a large number of rural community, including vulnerable groups, to enhance their income through employment and income generating activities (ref. para. 5.1.1).

9.2.2 Inadequate preparation of projects results in frequent modifications of project design, delays in loan effectiveness and project implementation, thus, contributing to project cost overruns (ref. para. 7.1.1, 4.2.4, 4.2.5 and 4.2.14).

9.2.3 Mid-term reviews are necessary for timely corrective implementation measures (para. 3.4.2).

9.2.4 Formal training of PMU staff on the Bank's rules of procurement and loan disbursement procedures is important for smooth project implementation (ref. para. 3.3.1).

9.2.5 Proper selection of realistic modes of procurement is essential in successful project implementation thus reducing unnecessary delays (ref. para. 3.2.1 and 3.5.1).

9.2.6 Although TLMP has managed to obtain information from cattle traders on individual basis using the traditional "closed" selling system, the Marketing Information System (MIS) has not developed well as it had been envisaged during project appraisal. MIS data has not been transparently generated and lacks authenticity. It was learnt that the information obtained through this system took long to be openly disseminated to the general public (ref. para. 4.2.14).

9.2.7 Prices charged for products and services that are generated by ADB funded projects should be market or commercially determined in order to reflect the economic value of the final products of the project.

9.2.8 Lack of proper skills mix of experts during appraisal normally affects the project design in terms of its technical scope and costing.

9.2.9 Too many and impractical loan conditions which are not discussed with the Borrower at the project design stage, tend to delay the loan effectiveness and project implementation (ref. 4.5).

9.2.10 Time wasted in completing the project, results in forfeiting the project benefits which could have accrued during the earlier years (ref. 7.1.1).

9.2.11 Five years is too short a period to implement a livestock project which normally requires 7 to 10 years to realise the full benefits (ref. 8.2).

9.3 Recommendations

To the Bank

1. For future projects, Bank's identification, preparation, appraisal and supervision missions should have all the proper skill-mix of expertise required for the given tasks.
2. For future ADB funded projects, appropriate modes of procurement should be recommended for the planned activities.
3. For all Bank funded projects, all necessary surveys and studies, including the Environmental and Social Impact Assessment, socioeconomic, and project infrastructure designs should be carried out before the commencement of the project implementation in order to set benchmarks against which progress and changes could be measured and evaluated.
4. Task Managers should monitor, throughout the project implementation, the evolution of the legal/regulatory environmental framework. During supervision, major unfunded environmental issues should be referred to management for consideration. The Bank's ESIA guidelines should be sent to the Borrower for use during ESIA and project implementation.
5. During project launching, training in the Bank Group's procurement rules and guidelines as well as loan disbursement procedures should be given to the Borrower.
6. Mid-term review should be conducted by the Bank, as a standard practice, so that corrective actions are taken in order to avoid delays during implementation (ref. 3.4.2).
7. Livestock sub-sector projects should be encouraged in Bank Group assisted programmes, as they provide employment opportunities to and enhance income for rural communities.
8. The loan conditions should be few, practical and rationalized and should be discussed with the Borrower at project appraisal stage (before the loan approval) in order to avoid delays in loan effectiveness and project implementation.
9. For future livestock projects, the implementation period of 7 to 10 years should be considered.

To the Borrower

1. Fulfilment of the loan conditions should be done, soon after loan approval (before the loan signature) in order to avoid delays in project implementation (ref. section 4.5).
2. Market infrastructures and Dodoma abattoir are now in place and functioning. However, for long term sustainability, they will have to be privatized, as agreed by GoT during negotiations of the Bank loan.
3. At the project design, it was expected that in order to develop a functioning Marketing Information System, the animal offered for sale would be weighed, graded, auctioned, and appropriate data compiled for dissemination to the public. It is therefore recommended that this system should be adopted on a pilot basis, starting with one selected secondary market,

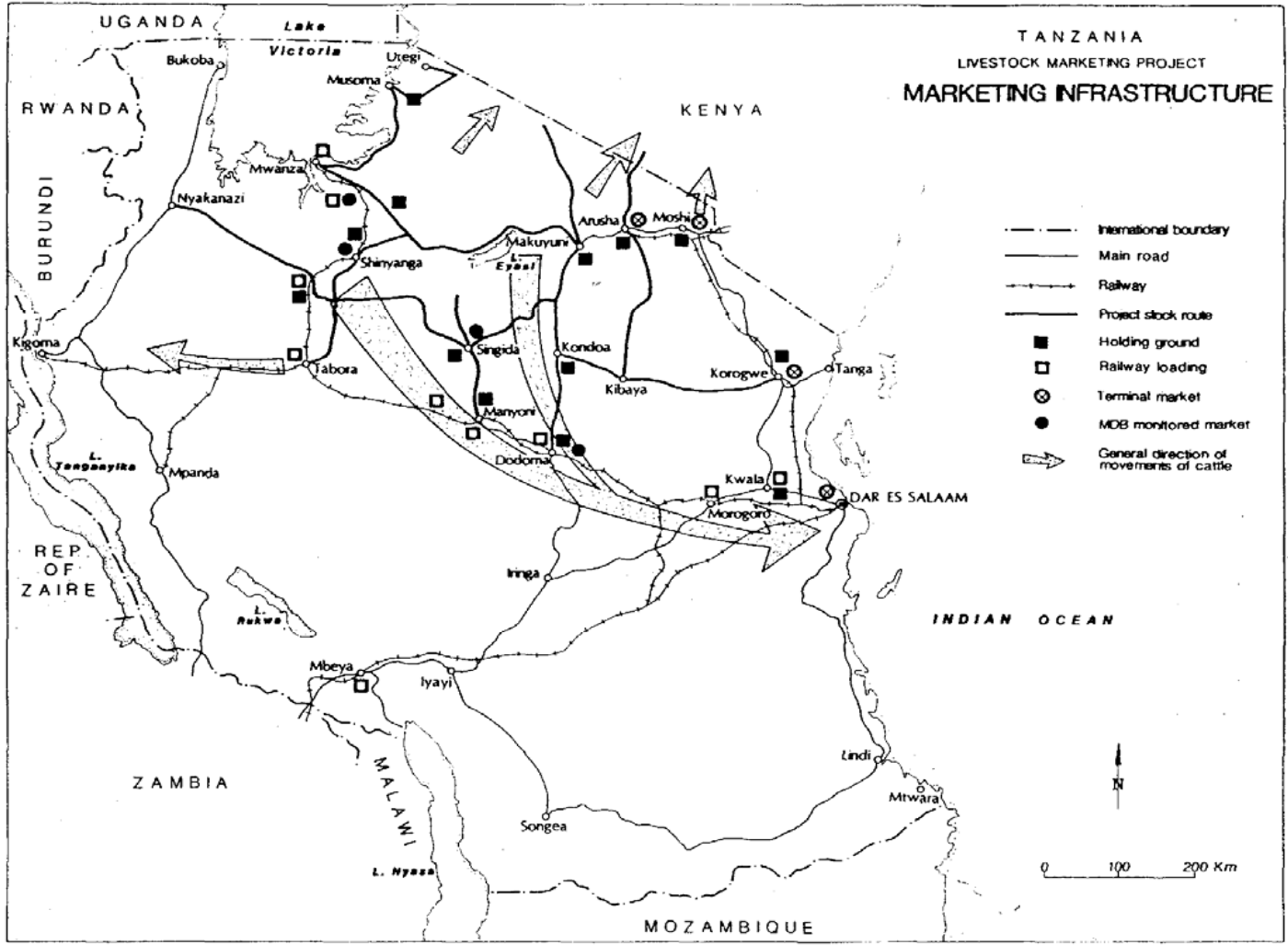
for example, Meserani secondary market with banking facility, and recommend necessary modifications, so that the desired “open auction system” can be fully established in all livestock markets.

4. In order for the project to realise fully its objectives of increasing the volume of wholesale meat available for local and export market, the Government should periodically revise the fees charged in order to enable TLMP maintain the Dodoma abattoir and livestock marketing infrastructure and continue to provide institutional support (ref. 4.6.4).
5. The implementation of the ESMP and EMP activities should be carried out as soon as possible since NEMC granted a conditional approval which has not been fully adhered to. The Dodoma abattoir’s incinerator should also be completed as a matter of urgency. A study should be carried out on the impact of animal husbandry on human health. The Borrower should familiarise itself with the Bank’s safeguard policy on Environment, Poverty Reduction, Gender, Population and Civil Society Participation.

To the Bank and the Borrower

1. The Bank and the Borrower should settle the outstanding claims as mentioned in 4.2.15, 4.2.18 and 4.2.19.
2. The Bank and the Borrower should strive, as much as possible, to adhere to the planned project implementation schedule in order to maximise the project benefits.
3. During project identification, preparation and appraisal of any future project, all key stakeholders, including grass-root beneficiaries, should be fully consulted. The livestock project should be demand driven, using appropriate technology, and include all infrastructure requirement from producer to the consumer.
4. Management Information System (MIS) including Monitoring and Evaluation (M&E) should be included in the project design, be established during Project Year 1, and be enforced during project implementation.

Tanzania Livestock Marketing Project
Map of Tanzania



Tanzania Livestock Marketing Project
Detailed Loan Disbursement

Country	: TANZANIA	Loan Currency	: UAC	Net Loan Amount	: 9,210,520.00
Borrower Number	: 9900000233	Approval Date	: 27.01.1992	Amount Approved	: 9,210,520.00
Borrower Name	: Ministry of Finance	Signature Date	: 01.12.1992	Amount Signed	: 9,210,520.00
Project Title	: Livestock Marketing Project	Effectiveness Date	: 12.07.1994	Amount Cancelled	: 0.00
Loan Number	: 2100150001003	Closing Date	: 31.12.2005	Undisbursed Balance	: 716,455.22

Value Date	Application Number	Beneficiary	LDV N°.	Currency / Amount Disbursed	Equivalent Disb. In UAC	Purpose
01.01.1992	Opening Balance					
05.08.1994	DP N°. 1	DANAGRO ADVISER A/S	F/TZA/1994/2512	USD 411,698.00	284,249.19	TA Services
27.09.1994	RF N°. 2	BOT LIVESTOCK MARKETING P	F/TZA/1994/3095	USD 605,300.00	417,918.07	Revolving Fund
24.03.1995	DP N°. 3	DANAGRO ADVISER A/S	F/TZA/1995/0536	JPY 6,760,652.00	46,614.90	TA Services
21/06/1995	DP N°. 4	DANAGRO ADVISER A/S	F/TZA/1995/1195	USD 71,676.00	45,482.29	TA Services
31/07/1995	DP N°. 6	DANAGRO ADVISER A/S	F/TZA/1995/1907	DEM 36,523.27	16,825.65	TA Services
31/07/1995	DP N°. 5	TOYOTA TSUSHO KAISHA LTD.	F/TZA/1995/1914	DEM 69,610.06	32,068.17	Vehicles
31/07/1995	DP N°. 7	NISSAN TRADING COMPANY LI	F/TZA/1995/1915	DEM 85,470.13	39,374.64	Vehicles
14/08/1995	DP N°. 9	NISSAN TRADING COMPANY LI	F/TZA/1995/2096	DEM 6,737.29	3,129.34	Vehicles
01/09/1995	DP N°. 8	TOYOTA TSUSHO KAISHA LTD.	F/TZA/1995/2296	USD 7,550.61	4,841.56	Vehicles
29/12/1995	DP N°. 12	DANAGRO ADVISER A/S	F/TZA/1995/3427	DEM 55,281.49	25,981.15	TA Services
06/02/1996	DP N°. 13	DANAGRO ADVISER A/S	F/TZA/1996/0255	DEM 62,381.14	28,805.08	TA Services
27/03/1996	DP N°. 16	DANAGRO ADVISER A/S	F/TZA/1996/0806	USD 41,203.00	28,054.44	TA Services
24/06/1996	DP N°. 10	TOYOTA TSUSHO KAISHA LTD.	F/TZA/1996/1653	JPY 4,427,200.00	28,371.30	Vehicles
05/07/1996	DP N°. 17	TOYOTA TSUSHO KAISHA LTD.	F/TZA/1996/1901	JPY 366,000.00	2,317.48	Vehicles
23/08/1996	DP N°. 18	DANAGRO ADVISER A/S	F/TZA/1996/2084	USD 52,453.00	35,790.90	TA Services
22/11/1996	DP N°. 20	DANAGRO ADVISER A/S	F/TZA/1996/3210	USD 69,047.00	47,742.75	TA Services
13/01/1997	DP N°. 21	DANAGRO ADVISER A/S	F/TZA/1997/0030	USD 47,254.00	32,861.83	TA Services
24/02/1997	DP N°. 22	DANAGRO ADVISER A/S	F/TZA/1997/0372	DEM 33,419.75	14,668.59	TA Services
23/06/1997	RF N°. 23	TANZANIA LIVESTOCK MARKETING	F/TZA/1997/1442	JPY 16,992,000.00	10,4841.00	Revolving Fund
24/07/1997	DP N°. 24, 25, 26	DANAGRO ADVISER A/S	F/TZA/1997/1700	USD 90,370.00	65,101.50	TA Services
22/12/1997	DP N°. 28	DANAGRO ADVISER A/S	F/TZA/1997/3012	DEM 148,449.67	61,805.61	TA Services
06/01/1998	RF N°. 27	TANZANIA LIVESTOCK MARKETING	F/TZA/1997/3199	DEM 360,577.12	150,122.87	Revolving Fund
03/04/1998	DP N°. 29	DANAGRO ADVISER A/S	F/TZA/1998/0693	DEM 280,381.35	113,647.23	TA Services
23/04/1998	DP N°. 30	DANAGRO ADVISER A/S	F/TZA/1998/0762	CHF 89,479.97	44,034.98	TA Services

Value Date	Application Number	Beneficiary	LDV N°.	Currency / Amount Disbursed	Equivalent Disb. In UAC	Purpose
23/07/1998	DP N°. 32	DANAGRO ADVISER A/S	F/TZA/1998/1739	JPY15,234,361.00	81,229.56	TA Services
06/08/1998	RF N°. 31	TANZANIA LIVESTOCK MARKETING	F/TZA/1998/1892	USD 261,387.00	196,606.97	Revolving Fund
29/10/1998	DP N°. 35	DANAGRO ADVISER A/S	F/TZA/1998/2587	JPY 4,418,095.00	23,820.95	TA Services
24/11/1998	DP N°. 36	UNDP/IAPSO MIDTERMOLLEN	F/TZA/1998/2845	JPY22,971,499.00	140,128.22	Vehicles
18/02/1999	DP N°. 37	DANAGRO ADVISER A/S	F/TZA/1999/0264	EUR 37,232.53	30,498.22	TA Services
05/05/1999	DP N°. 38	DANAGRO ADVISER A/S	F/TZA/1999/1009	EUR 57,169.69	44,835.10	TA Services
05/05/1999	RF N°. 39	TANZANIA LIVESTOCK MARKETING	F/TZA/1999/1030	EUR 213,597.14	167,512.72	Revolving Fund
29/06/1999	DP N°. 41	SISU TRACTORS (T) LTD.	F/TZA/1999/1468	JPY29,266,954.00	180,376.28	Tractor
28/07/1999	RF N°. 42	TANZANIA LIVESTOCK MARKETING	F/TZA/1999/1735	EUR 241,808.86	186,948.75	Revolving Fund
28/07/1999	RF N°. DP 43	OVERSEAS DEVELOPMENT GROUP	F/TZA/1999/1736	EUR 10,880.98	8,412.37	Tractor
04/08/1999	DP N°. 41 BIS	SISU TRACTORS (T) LTD.	F/TZA/1999/1806	EUR 28,196.46	22,103.08	TA Services
24/08/1999	DP N°. 44	DANAGRO ADVISER A/S	F/TZA/1999/1977	EUR 56,082.87	43,963.12	TA Services
18/11/1999	DP N°. 47	DANAGRO ADVISER A/S	F/TZA/1999/2678	JPY 2,704,794.00	18,683.65	TA Services
27/01/2000	RP N°. DP 49	VICTORIA UNIVERSITY OF MANCHESTER	F/TZA/1999/3044	EUR 14,828.21	10,865.78	Training
08.03.2000	DP N°. 51	TANZANIA INDUSTRIAL STUDIES AND CONSULTI	F/TZA/2000/0500	EUR 61,002.18	44,245.84	TA Services
10.03.2000	RF N°. 46 & 48	TANZANIA LIVESTOCK MARKETING	F/TZA/2000/0512	EUR 280,154.51	426,559.09	Revolving Fund
22.03.2000	RP N°. DP 52	INTERNATIONAL INSTITUTE FOR INFRASTRUCTURE	F/TZA/2000/0520	EUR 4,719.31	3,422.99	Training
05.07.2000	DP N°. 53	HOLSTEBRO TECHNICAL COLLEGE	F/TZA/2000/1142	EUR 15,772.87	11,271.09	Training
05.09.2000	DP N°. 54	UNDP/IAPSO MIDTERMOLLEN	F/TZA/2000/1488	EUR 122,055.97	83,310.11	Vehicles
12.12.2000	DP N°. 58	SISU TRACTORS LTD	F/TZA/2000/2056	EUR 33,804.70	22,899.19	Tractors
15.02.2001	DP N°. 60	TANZANIA INDUSTRIAL STUDIES AND CONSULTI	F/TZA/2001/0210	EUR 74,314.81	53,214.28	TA Services
27.02.2001	RF N°. 61	TANZANIA LIVESTOCK MARKETING	F/TZA/2001/0274	EUR 1,447,185.60	1,036,279.90	Revolving Fund
14.01.2002	DP N°. 62	JOS HANSEN AND SOEHNE	1/TZ/2002/03752	GBP 95,302.70	109,263.27	Farm Machinery
16.08.2002	DP N°. 65	TANZANIA INDUSTRIAL STUDIES AND CONSULTI	1/TZ/2002/07022	USD 19,600.00	14,834.10	TA Services
27.08.2002	DP N°. 64	SCANAGRI DENMARK A/S	1/TZ/2002/07161	JPY 1,807,900.00	11,508.18	TA Services
29.08.2002	RF N°. 63	TANZANIA LIVESTOCK MARKETING	1/TZ/2002/07128	USD 1,458,932.19	1,107,601.12	Revolving Fund
04.09.2002	DP N°. 66B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2002/07251	USD 83,324.75	62,994.05	Turn-key Contract
04.09.2002	DP N°. 66A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2002/07230	USD 500,072.34	376,989.15	Turn-key Contract
24.03.2003	DP N°. 70B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2003/09871	JPY 1,014,480.00	6,299.36	Turn-key Contract
25.03.2003	DP N°. 70A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2003/09860	JPY 6,648,449.00	41,283.18	Turn-key Contract
02.05.2003	DP N°. 68A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2003/10215	JPY 15,630,258.00	94,443.79	Turn-key Contract

Value Date	Application Number	Beneficiary	LDV No.	Currency/Amount Disbursed	Equivalent Disb. In UAC	Purpose
02.05.2003	DP N°. 69	TANZANIA INDUSTRIAL STUDIES AND CONSULTI	1/TZ/2003/10213	JPY 1,180,214.00	7,131.29	TA Services
05.05.2003	DP N°. 68B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2003/10214	JPY 2,399,221.00	14,496.98	Turn-key Contract
09.07.2003	DP N°. 71A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2003/11145	USD 76,178.13	54,178.05	Turn-key Contract
24.07.2003	DP N°. 71B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2003/11365	JPY 1,382,861.00	8,384.43	Turn-key Contract
04.09.2003	RP N°. 72	TANZANIA LIVESTOCK MARKETING	1/TZ/2003/11828	JPY 7,431,457.00	46,098.28	Revolving Fund
17.12.2003	DP N°. 73A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2003/12975	JPY 26,962,504.00	170,650.92	Turn-key Contract
17.12.2003	DP N°. 73B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2003/12976	JPY 4,066,995.00	25,740.80	Turn-key Contract
25.02.2004	DP N°. 74A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2004/13801	USD 608,864.92	405,826.08	Turn-key Contract
26.02.2004	DP N°. 74B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2004/13802	USD 87,379.63	58,698.02	Turn-key Contract
23.03.2004	DP N°. 75	TANZANIA INDUSTRIAL STUDIES AND CONSULTI	1/TZ/2004/14182	JPY 1,048,600.00	6,445.55	TA Services
13.05.2004	DP N°. 76B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2004/14781	USD 47,467.56	32,570.03	Turn-key Contract
19.05.2004	DP N°. 76A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2004/14740	USD 333,454.75	228,801.12	Turn-key Contract
21.07.2004	DP N°. 78B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2004/15597	JPY 2,626,231.00	16,269.55	Turn-key Contract
21.07.2004	DP N°. 78A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2004/15602	JPY 18,199,830.00	112,748.30	Turn-key Contract
28.07.2004	DP N°. 79	TOYOTA TANZANIA LTD	1/TZ/2004/15712	JPY 7,635,870.00	47,436.90	Vehicles
13.08.2004	DP N°. 77	DANAGRO ADVISER A/S	1/TZ/2004/15901	USD 34,210.40	23,264.15	TA Services
22.09.2004	DP N°. 80	TANZANIA INDUSTRIAL STUDIES AND CONSULTI	1/TZ/2004/16299	JPY 1,078,882.00	6,711.09	TA Services
06.10.2004	DP N°. 79	DANAGRO ADVISER A/S	1/TZ/2004/16520	EUR 22,143.84	18,705.57	TA Services
18.10.2004	DP N°. 82B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2004/16610	JPY 57,233.00	3,587.19	Turn-key Contract
18.10.2004	DP N°. 82A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2004/16608	JPY 3,846,241.00	23,902.31	Turn-key Contract
21.10.2004	DP N°. 83A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2004/16710	JPY 13,093,157.00	81,036.55	Turn-key Contract
21.10.2004	DP N°. 83B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2004/16706	JPY 1,952,139.00	12,082.24	Turn-key Contract
25.10.2004	DP N°. 84	DANAGRO ADVISER A/S	1/TZ/2004/16711	JPY 16,044,284.00	99,040.62	TA Services
25.11.2004	DP N°. 85	DANAGRO ADVISER A/S	1/TZ/2004/17118	JPY 8,144,211.00	51,526.07	TA Services
16.03.2005	DP N°. 89	DANAGRO ADVISER A/S	1/TZ/2005/18559	JPY 8,133,786.00	50,478.08	TA Services
16.03.2005	DP N°. 86	TOYOTA TANZANIA LTD	1/TZ/2005/18581	JPY 848,430.00	5,292.04	Vehicles
30.03.2005	RF N°. 87 BIS	TANZANIA LIVESTOCK MARKETING	1/TZ/2005/18754	EUR 235,013.29	202,527.84	Revolving Fund
11.05.2005	DP N°. 90A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2005/19379	USD 98,513.23	64,965.63	Turn-key Contract
11.05.2005	DP N°. 91	DANAGRO ADVISER A/S	1/TZ/2005/19402	USD 43,252.00	28,523.01	TA Services
12.05.2005	DP N°. 90B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2005/19380	USD 14,176.69	9,348.97	Turn-key Contract
24.05.2005	DP N°. 92	MICRONIX SYSTEMS LIMITED	1/TZ/2005/19532	USD 31,140.00	20,899.47	Computers
13.07.2005	DP N°. 93A	D.T. DOBIE & CO. (T) LTD.	1/TZ/2005/20193	EUR 54,539.19	44,978.92	Vehicles
13.07.2005	DP N°. 93B	D.T. DOBIE & CO. (T) LTD.	1/TZ/2005/20192	EUR 55,358.98	45,655.01	Vehicles
27.07.2005	DP N°. 94	D.T. DOBIE & CO. (T) LTD.	1/TZ/2005/20350	USD 41,352.13	28,545.09	Vehicles
02.09.2005	DP N°. 95	DANAGRO ADVISER A/S	1/TZ/2005/20737	JPY 1,684,346.00	10,417.20	TA Services
25.01.2006	DP N°. 97 B	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2006/22752	EUR 12,912.54	10,785.53	Turn-key Contract
25.01.2006	DP N°. 97 A	CHINA GEO-ENGINEERING CORPORATION	1/TZ/2006/22751	EUR 95,000.91	79,351.92	Turn-key Contract

Tanzania Livestock Marketing Project

Re-calculation of Economic Internal Rate of Return (*Project Completion*)

Year	Costs with Project (UA)			Benefits with Project (UA)				Net Incremental Income
	Investment	O&M	Incremental Total Cost	Market Fees	Movement Permit Fees	Cattle Wagon Fees	Total Income	
1994	464,304	267,960	732,264	-	-	-	-	-732,264
1995	113,576	93,411	206,987	-	-	-	-	-206,987
1996	142,923	296,140	439,063	125,678	135,358	958,334	1,219,370	780,307
1997	218,220	339,423	557,643	146,141	153,138	795,988	1,095,267	537,624
1998	685,929	346,216	1,032,145	145,186	152,142	615,213	912,541	-119,604
1999	624,333	321,113	945,446	172,595	186,497	126,314	485,407	-460,039
2000	1,060,451	336,728	1,397,179	198,608	208,105	326,046	732,759	-664,420
2001	206,717	214,690	421,407	188,790	219,701	426,437	834,928	413,521
2002	1,007,221	419,109	1,426,328	170,763	261,923	329,408	762,094	-664,234
2003	217,330	264,441	481,771	198,472	237,722	251,834	688,028	206,257
2004	530,309	548,749	1,079,058	228,130	245,232	301,259	774,621	-304,437
2005	5,139	548,749	553,888	275,080	291,918	266,441	833,439	279,552
2006		548,749	548,749	275,080	291,918	264,119	831,117	282,368
2007		548,749	548,749	275,080	291,918	264,119	831,117	282,368
2008		548,749	548,749	275,080	291,918	264,119	831,117	282,368
2009		548,749	548,749	275,080	291,918	264,119	831,117	282,368
2010		548,749	548,749	275,080	291,918	264,119	831,117	282,368
2011		548,749	548,749	275,080	291,918	264,119	831,117	282,368
2012		548,749	548,749	275,080	291,918	264,119	831,117	282,368
2013		548,749	548,749	275,080	291,918	264,119	831,117	282,368
Total	5,276,452	8,386,719	13,663,171	4,050,086	4,427,076	6,510,230	14,987,392	1,324,221
Estimated EIRR		8%						

Tanzania Livestock Marketing Project
Performance Evaluation and Rating

Overall Assessment: Key of Rating¹⁰

Category HS	Highly Satisfactory, when overall average score is in excess of 3 (3<R<4). Ratings between 1 or 2 for component indicators should be stated.
Category S	Satisfactory, when overall average score is in excess of 2, but does not exceed 3 (2<R<3). Ratings between 1 or 2 for component indicators should be stated.
Category US	Unsatisfactory, when overall average score is in excess of 1, but does not exceed 2 (1<R<2).
Category HUS	Highly unsatisfactory, when overall average does not exceed 1 and includes the rest.

A. Implementation Performance Rating

FORM IP 1

Component Indicators	Score (1 to 4)	Remarks
1. Adherence to Time Schedule	1	Delay of almost 18 months from approval to loan effectiveness and 12 years of implementation compared to the planned 5 years.
2. Adherence to Cost Schedule	2	The Bank disbursed 92.18% and the GOT contributed 289.26% over 12 years instead of 5.
3. Compliance with Covenants	2	Fulfilment of conditions precedent to loan effectiveness delayed for about 2 years
4. Adequacy of Monitoring & Evaluation and Reporting	3	37 QPRs, 2 bi-AR, 1 AR, 33 PSC meeting minutes and 11 Annual Audit Reports. No M&E system was in place but TLMIS has just been set up though not fully functional.
5. Satisfactory Operations (if applicable)	3	Major civil works construction/rehabilitation completed (except for 1 railway siding at Kizota).
TOTAL	11	
Overall Assessment of Implementation Performance	2.2	Satisfactory

B. Bank Performance Rating

FORM BP 1

Component indicators	Score (1 to 4)	Remarks
1. At identification	2	Identification was well done by FAO Investment Centre and the report was used for appraisal.
2. At Preparation	2	Because of urgency of investment, identification and preparation were undertaken during the same period.
3. At Appraisal	1	Project quality at entry was poor. No EIA study, mid-term review, baseline survey & project Logframe (matrix) were included. Some targets were too optimistic.
4. At Supervision	3	Good frequency. Supervision mission also had adequate skills mix.
Overall Assessment of Bank Performance	2.0	Unsatisfactory

¹⁰ Source: African Development Bank Group: Operations Manual, Chapter 9 – Project Completion Report. June 1999

C. Project Outcome Rating

FORM PO 1

No	Component Indicators	Score (1 to 4)	Remarks
1	Relevance and Achievement of Objectives	2.43	
i.	Macro-economic policy	2	
ii.	Sector policy	2	
iii.	Physical (including production)	3	Planned marketing infrastructures, cattle wagons and railway sidings) have been rehabilitated
iv.	Financial	3	Infrastructure is partially self-financing and contributes to project finances
v.	Poverty alleviation, social & Gender	3	Some benefits to communities around Project area including better incomes and improved livestock infrastructures
vi.	Environment	2	ESMP and EMP in place. Some activities have been carried out by GOT, other will be done after sourcing funds
vii.	Private Sector Development	2	Privatisation process has been initiated by GOT but some structures are not yet ready (legally) for privatisation (ref. para. 4.2.6 and 6.3.1).
viii.	Other (specify)		
2	Institutional Development	2.5	
i.	Institutional Framework including restructuring	2	TLMP was managed by PMU & TA through out implementation period
ii.	Financial & Management Information Systems, including Audit Systems	2	Disbursement had problems in slowness but Annual Audit Reports were timely submitted
iii.	Transfer of Technology	3	Technology transfer was fine at technical and management levels.
iv.	Staffing by qualified persons (including turn-over), training, & counterpart staffing.	3	Qualified staff were recruited with low turnover. Adequate technical short-courses were provided to staff. On-the-job training was also emphasised by the TAs
3	Sustainability	2.37	
i.	Continued Borrower Commitment	3	Local funding was guaranteed and TLM Agency will be created to look after the project infrastructure
ii.	Environmental Policy	3	Draft Policy is in place which was used by TLMP.
iii.	Institutional Framework	2	TLMP was managed by PMU and TA. Privatisation process was initiated
iv.	Technical Viability and Staffing	3	Transfer of technology from TA to local staff, through training programme provided by the Project.
v.	Financial Viability including cost recovery systems	2	Capacity for self-financing and cost recovery might be possible if commercially managed.
vi.	Economic viability	2	Slightly Positive
vii.	Environmental Viability	2	Some problems are anticipated if GoT does not source funds for implementation of ESMP and EMP recommendations. Some measures already put in place by GoT
viii.	O&M facilitation (availability of recurrent funding, foreign exchange, spare parts, workshop facilities, etc.)	2	Project can generate resources for O&M excluding salaries. Situation might improve after privatisation.
4.	Economic Internal Rate of Return	2	8% EIRR (without export)
TOTAL		9.30	
Overall Assessment of Outcome		2.32	Satisfactory

Tanzania Livestock Marketing Project

Recommendations and Follow-up Matrix

Issues	Lessons Learned/ Recommendations	Follow-up Actions	Responsibility
Livestock-sector projects are relevant in Tanzania	Appropriate livestock marketing infrastructure does provide a good opportunity for employment and income-generating activities	For future, more livestock marketing projects should be promoted	ADB/Borrower
No baseline data	EIA, baseline and feasibility studies should be carried out to facilitate in defining realistic targets and indicators for proper monitoring and evaluation	As a general rule, EIA and baseline studies should be carried out for all future projects before implementation	ADB
No proper skills mix during Missions	Proper skills mix should be made so in line with the proposed task	Task Managers should provide adequate experts during the Mission	ADB
No proper stakeholder consultation	Proper consultation should be done, with all key stakeholders, during project identification, preparation and appraisal in order to avoid delays and wasteful investment	Participatory methodologies should be used during project identification, preparation and appraisal	ADB/Borrower
Poor record keeping due to lack of MIS (including M&E)	Management Information System (MIS) including Monitoring and Evaluation (M&E) should be included in the project design and be enforced during project implementation.	MIS and M&E should be part of the project design and be used as management tools during implementation	ADB/Borrower
No provision for Mid-term Review	Mid-term review, for each project, should be conducted so that corrective implementation measures are taken	As a general rule, mid-term review should be carried out for all future projects	ADB/Borrower
No training of PMU staff in procurement and disbursement procedures	Formal training of PMU staff on the Bank's rules of procurement and loan disbursement procedures is important for smooth project implementation	During project launching, Borrower should be trained in the Bank Group's procurement rules and guidelines as well as loan disbursement procedures.	ADB
Too many loan conditions	Loan conditions should be rationalized and kept to a minimum in order to avoid delays in loan effectiveness and project implementation	Loan conditions should be few and realistic.	ADB
Marketing information system was established but not used	Although TLMP has managed to obtain information from cattle traders on individual basis using the traditional "closed" selling system, the MIS has not developed well as it had been envisaged during project appraisal. MIS data has not been transparently generated and lacks authenticity. It was learnt that the information obtained through this system took long to be openly disseminated to the general public.	This system should be adopted on a pilot basis, starting with one selected secondary market, for example, Meserani secondary market with banking facility, and recommend necessary modifications, so that the desired "open auction system" can be fully established in all livestock markets.	Borrower
Poor operation and maintenance of the infrastructures	While it is the Government's intention to privatize the Dodoma abattoir and livestock marketing infrastructure in the long run, in mean time TLMP which is presently managing these structures should revise fees charged (slaughter fees, market fees and movement permit) in order to meet the operation and maintenance costs	In order for the project to realise fully its objectives of increasing the volume of wholesale meat available for local and export market, the Government should periodically revise the fees charged in order to enable TLMP maintain the Dodoma abattoir and livestock marketing infrastructure and continue to provide institutional support	Borrower

Tanzania Livestock Marketing Project

Borrower's Project Completion Report (presented under separate cover)

The Borrower's Project Completion Report (PCR) was submitted, to the Bank, in June 2005. The Borrower's PCR was presented as one document with respect to the "Table of Contents" reproduced below:

EXECUTIVE SUMMARY

PROJECT COMPLETION REPORT

- I. INTRODUCTION
- II. PROJECT OBJECTIVE AND FORMULATION
- III. PROJECT EXECUTION
- IV. PROJECT PERFORMANCE
- V. PROJECT SUSTAINABILITY
- VI. PERFORMANCE OF THE BANK AND THE BORROWER
- VII. OVERALL PERFORMANCE AND RATING
- VIII. LESSONS, RECOMMENDATIONS AND CONCLUSION

ANNEX

1. Basic Data
2. Project Description
3. Fulfilment of Loan Conditions
4. Organisation and Management
5. Procurement
6. Loan Utilisation
7. Operational Performance

Tanzania Livestock Marketing Project

Sources of Information

1. “Appraisal Report”, African Development Fund/The United Republic of Tanzania; Tanzania Livestock Marketing Project. December 1991.
2. “Project Completion Report”, The United Republic of Tanzania, Ministry of Water and Livestock Development; Tanzania Livestock Marketing Project. June 2005.
3. “Strategies to Enhance the Participation of Women in the Livestock and Meat Marketing Chain: Final Report on Women in Development” - Tanzania Livestock Marketing Project, Danagro Adviser a/s Mrs Halima Chande. July 1999.
4. “Contract for International Consultancy Services”, The United Republic of Tanzania, Ministry of Agriculture; Tanzania Livestock Marketing Project. February 1994.
5. “Dodoma Abattoir and Meat Industry Training Centre - Contract between Ministry of Water and Livestock Development and China Geo-Engineering Corporation”, The United Republic of Tanzania, Ministry of Water and Livestock Development; Tanzania Livestock Marketing Project. June 2002.
6. “Environmental Impact Assessment Report for the Proposed Dodoma Abattoir and Associated Marketing Infrastructure Project”, JSB Envidep Ltd, Dar-es-salaam, Tanzania. December 2002.
7. “Environmental Impact Assessment Review for Dodoma Abattoir and Associated Marketing Infrastructure Project – Draft Report: Tanzania Livestock Marketing Project”, Deloitte Touche Tohmatsu Emerging Markets (Canada). February 2003.
8. “Quarterly Progress Report Numbers 1 to 37”, The United Republic of Tanzania - Tanzania Livestock Marketing Project: (*All QPRs, Bi-AR & AR: June 1995 to 2005*).
9. “Project Steering Committee Meeting Minutes Numbers 30, 31 and 32”, The United Republic of Tanzania - Tanzania Livestock Marketing Project, Project Management Unit. (*Annual Minutes: 2003, 2004, and 2005*).
10. “Accounts and Balance Sheets (Annual Audit Reports)”, The United Republic of Tanzania - Tanzania Livestock Marketing Project: A. I. Khatri & Co, Accountants and Auditors, Dar-es-salaam; (*All AAR: 1995 to 2005*).
11. “Assorted Bank Mission’s Aide Memoires”, TLMP copies. Reference - Basic Project Data Sheet, Section D: Bank Missions.
12. Office Files (assorted), TLMP.
13. “Cattle Live-weight Study Report” - Tanzania Livestock Marketing Project, Sokoine University of Agriculture. April 2001.
14. “The Business Plan for Dodoma Abattoir” - Tanzania Livestock Marketing Project, Scanagri (Danagro Adviser a/s), Dar-es-salaam. April 2004.

Tanzania Livestock Marketing Project
Fulfilment of Loan Conditions and Covenants

A. Conditions Prior to Entry into Force

(Date of Loan Approval: 27th January 1992 & Date of Entry into Force: 12th July 1994)

No.	Loan Conditions	Date fulfilled	Slippage	Remarks (Reasons for delay)
i.	Set up a Steering committee	May 1992	None	NA
ii.	Set up a Project Management Unit	July 1994	24 months (For details see Table 1 (Section 3.3.1))	Danagro Advisor a/s supplied all key TA for the PMU. There was a delay from GoT in granting tax exemption in favour of Danagro, due to which the service contract with Danagro was not signed until July 12, 1994 (ref. Para. 4.2.18 and 7.2.1).
iii.	Appoint a National Project Manager	July 1993	12 months	Delay was due to locating a suitably qualified person whose CV was acceptable to the Fund.
iv.	Undertake to revise, annually movement permit fees, to ensure that they keep up with cost increases.	1992	None	Undertaking given in 1992. The fees revised upwards only twice, in 1994 and 2001 (ref. para. 4.6.4).
v.	Undertake to privatize rehabilitated/constructed markets and stock routes.	1992	None	Undertaking given in 1992. Scanagri A/S prepared the draft and submitted it to ADB for review. The process of privatization requires that the structures are surveyed, registered and issued with title deeds, which is a prerequisite to privatization (ref. Para. 4.2.6 and 6.3.1).

B. Other Conditions:

No.	Loan condition	Date fulfilled	Slippage	Remarks (reasons for delay)
i.	Appoint local staff to implement the project, 6 months after Entry Into Force	(1) July, 1993 (2) August 1995	(1) None (2) 3 months	(1) Two staff in each region appointed in July 1993. (2) In PMU Head office, last person appointed was Abattoir Manager (Acting /civil Engineer) in April 1995. Reason for delay was finding suitably qualified and experienced persons. (See Table 1. Section 3.3.1)
ii.	Incorporate MITC training curricula in MLYD	24-7-1997		Approval of ADF was obtained on 24-7-1997 to integrate MITC into VETA which is now under Ministry of Education and Vocational Education, instead of Ministry of Labour and Youth Development. Training curriculum has been revised. (ref. Borrower's PCR Annex- 3.b.(2))
iii.	Review, within one year after entry into force of the loan, quarantine regulations for animals using stock routes	NA		The regulations were reviewed by the MALDC (Dates not given). These regulations are now included in Tanzania Animal Diseases Act, 2003, which is pending approval of Attorney General's office.
iv.	Revenue from market and movement permit fees should be used for maintenance of market infrastructure as a revolving fund.	1 st July 1995		After obtaining permission from the Government on 1 st July 1995, the fees were being used by PMU as a revolving fund.
v.	To take necessary actions to ensure implementation of Food (control of quality) Act in Dodoma city when the new abattoir is operational	NA		According to AR, it was proposed that when abattoir becomes operational, private slaughter slabs, which might violate the act, should not continue to operate in Dodoma. The Dodoma abattoir was commissioned in October 2005, and since that date, all private slabs ceased to operate.
vi.	Cause MALDC within project year 2 to draw procedures for letting out the management of Dodoma abattoir to the private sector	In progress		Scanagri A/S prepared a draft report on privatization of Dodoma abattoir. The abattoir was commissioned in October 2005. The process of privatization is in progress. The GOT has decided to retain 49% share and offer 51% share to the private sector.

Tanzania Livestock Marketing Project

Status of Project Achievements

Item Description	unit	Qty Planned	Qty Achieved	Percentage (%)
1. CIVIL WORKS				
A. Livestock Marketing Infrastructure				
i. Night camps	no.	90	90	100
ii. Check points	no.	15	15	100
iii. Holding grounds	no.	13	13	100
iv. Markets	no.	56	56	100
v. Railway sidings	no.	10	9	90
vi. Stock Routes	km	1,200	940	78.3
B. Dodoma Abattoir	no.	1	1	100
C. Meat Industry Training Centre	no.	1	1	100
2. BUILDINGS				
A. Dodoma Abattoir	no.	1	1	100
B. Meat Industry Training Centre	no.	1	1	100
3. VEHICLES & MACHINERY				
A. Livestock Marketing Infrastructure				
i. Truck 7t tipper	no.	1	1	100
ii. Tractor 80 HP 4WD	no.	13	13	100
iii. Trailer (3-5 ton)	no.	13	13	100
iv. Rotary slasher (heavy duty)	no.	13	13	100
v. Disc harrows (heavy duty)	no.	5	5	100
vi. Reciprocating mower (mounted)	no.	13	13	100
vii. Water bowser (towed, 2250lt)	no.	4	4	100
viii. Earth mover/scrapper blade (towed)	no.	13	13	100
ix. Front end loader	no.	13	13	100
x. Mobile gen-set & welding machine	no.	1	0	0
xi. Water pumps (hand pumps)	no.	25	25	100
xii. Water pumps (submersible)	no.	1	1	100
xiii. Water pumps (motor driven m/pump)	no.	1	0	0
xiv. 4x4 double-cab pick up	no.	3	3	100
xv. Motorcycles 125 cc (Trials type)	no.	40	40	100
xvi. Spare parts (15%)	lump sum	1	1	100
B. Dodoma Abattoir				
i. Station wagon 4-WD	no.	1	1	100
ii. Minibus	no.	1	1	100
iii. Meat trans.van (insulated/Refrigerated)	no.	1	1	100
iv. Tractor 80 HP 4WD, with trailer	no.	1	1	100
v. Spare parts (10%)	lump sum	1	1	100
C. Meat Industry Training Centre				
i. Minibus	no.	1	0	0
ii. Pick-up 2WD	no.	1	1	100
iii. Spare parts (15%)	lump sum	1	1	100
D. Institutional Support				
i. 4x4 station wagon	no.	1	1	100
ii. 4x4 pick-up (double cab)	no.	2	2	100
iii. 2x4 pick-up (double cab)	no.	1	1	100
iv. Spare parts (15%)	lump sum	1	1	100
4. RAILWAY WAGONS				
A. Livestock Marketing Infrastructure				
i. Railway cattle wagon bogies (cwb's)	no.	60	60	100

Item Description	unit	Qty Planned	Qty Achieved	Percentage
5. EQUIPMENT				
A. Livestock Marketing Infrastructure				
i. Computers & accessories	set	17	17	100
ii. Office equipment (copier)	set	2	2	100
iii. Hard furnishing	set	40	20	50
iv. Veterinary equipment	set	12	0	0
v. Training equipment & materials	lump sum	1	1	100
vi. Hand tools	set	50	0	0
vii. Radio communication	no.	12	12	100
viii. Solar panels for radio equip.	no.	12	12	100
ix. Camping and safari equipment	set	1	0	0
B. Dodoma Abattoir				
i. Slaughter & dressing equipment	lump sum	1	1	100
ii. Electrical equipment	lump sum	1	1	100
iii. Water supply	lump sum	1	1	100
iv. Waste water pump	lump sum	1	1	100
v. Hot & cold water service	lump sum	1	1	100
vi. Equipment for chillers	lump sum	1	1	100
vii. Miscellaneous equipment	lump sum	1	1	100
viii. Design & supervision	lump sum	1	1	100
C. Meat Industry Training Centre				
i. Slaughter equipment	lump sum	1	1	100
ii. Cutting/processing equipment	lump sum	1	1	100
iii. Electrical equipment	lump sum	1	1	100
iv. Hot & cold water/plumbing	lump sum	1	1	100
v. Hot water boiler	no.	1	1	100
vi. Protective clothes	lump sum	1	1	100
vii. Refrigeration equipment	no.	2	2	100
viii. Amenities equipment	lump sum	1	0	0
ix. Office equipment	lump sum	1	1	100
x. Spares/2 years (5%)	lump sum	1	1	100
xi. Design & supervision	lump sum	1	1	100
6. TECHNICAL ASSISTANCE				
i. Long Term - TA (Danagro/Scanagri)	person-months	108	100	92.6
ii. Short Term Consultants (Danagro/Scanagri)	person-months	49	14.5	29.6
iii. Consultancy - Dodoma Abattoir & MITC	lump-sum	1	1	100
7. VETERINARY DRUGS AND CHEMICALS				
A. Livestock Marketing Infrastructure				
i. Veterinary drugs and acaricides	lump sum	1	1	100
8. TRAINING AND STUDY TOURS				
A. Institutional Support				
i. Project Management seminars etc	lump sum/year	2	2	100
ii. Training - short courses (2 mm each)	no.	3	3	100
iii. Study tours	no.	2	2	100
iv. Studies (including Border markets)	no.	1	1	100
9. RECURRENT COSTS				
A. Livestock Marketing Infrastructure				
i. Civil works (10% of base cost)	lump sum/year	2	2	100
ii. Vehicles (actual operating cost estimates)	lump sum/year	2	2	100
iii. Railway wagons	lump sum/year	2	2	100

Item Description	unit	Qty Planned	Qty Achieved	Percentage
B. Dodoma Abattoir				
i. Working capital (1st year)	lump sum	1	1	100
C. Institutional Support				
C1. Meat Industry Training Centre				
i. Operations costs	lump sum/year	1	1	100
ii. Permanent staff	lump sum/year	1	1	100
iii. Training of trainers	lump sum/year	1	1	100
iv. Vehicle operating cost (15% base cost)	lump sum/year	1	1	100
C2. Training & Project Management				
i. PMU senior staff	lump sum/year	2	2	100
ii. PMU general staff	lump sum/year	2	2	100
iii. Vehicle O & M (based on usage)	lump sum/year	2	2	100
iv. Office operating costs	lump sum/year	2	2	100
v. DSA & allowances, National Staff	lump sum/year	2	2	100
vi. PMU office accommodation rent	lump sum/year	2	2	100
vii. Stationery	lump sum/year	2	2	100
viii. Office equipment (5% of base cost)	lump sum/year	2	2	100
ix. Marketing Information Service	lump sum/year	2	2	100

Tanzania Livestock Marketing Project
List of Rehabilitated/Constructed Infrastructures and Railway Sidings

No	Name	Area occupied	Purpose (Description)
Arusha and Manyara Regions			
1	Dosidosi	10 acres	Primary Livestock Market
2	Endakikot	12 acres	Primary Livestock Market
3	Endasak	20 acres	Primary Livestock Market
4	Gendi	12 acres	Primary Livestock Market
5	Karatu	15 acres	Primary Livestock Market and Night camp
6	Katesh	20 acres	Primary Livestock Market and Veterinary check point
7	Kibaya	20 acres	Primary Livestock Market
8	Kidarafa	7 acres	Primary Livestock Market and Veterinary check point
9	Longido	2 acres	Border Livestock Market
10	Meserani	5 acres	Secondary Livestock Market
11	Mto wa Mbu	15 acres	Primary Livestock Market and Night camp
12	Themí	12,000 acres	Holding ground and Secondary Livestock Market
13	Wasso	4 acres	Border Livestock Market
14	Galapo	20 acres	Primary Livestock Market and Night camp
15	Makuyuni	5,440 acres	Holding ground.
16	Kilimamoja	20 acres	Night camp
17	Endabashi	10 acres	Night camp
18	Mang'ola	20 acres	Night camp
19	Mdori	15 acres	Night camp
20	Custom	3 acres	Night camp
21	Terrat	20 acres	Night camp
22	Shambarai	20 acres	Night camp
23	Loibosiret	20 acres	Veterinary check point and Holding ground
24	Katech to Babati	70 km	Stock route
Dar-es-salaam and Coast Regions			
1	Kwala	83,600 acres	Holding ground and Quarantine station
2	Pugu	1,960 acres	Secondary livestock market and Holding ground
3	Ruvu	7 acres	Veterinary Check point
Dodoma Region			
1	Chipogoro	16 acres	Primary livestock Market and Night camp
2	Farkwa	15 acres	Primary livestock Market
3	Haneti	24 acres	Primary livestock market and Night camp
4	Kigwe	36 acres	Primary livestock market and night camp
5	Kizota (Zuzu)	1,161 acres	Holding ground and Secondary livestock market
6	Bahi	226 acres	Veterinary check point
7	Busi (Sumbwa)	14 acres	Night camp
8	Chandama	5 acres	Night camp
9	Chemba	16 acres	Night camp
10	Dalai	12 acres	Night camp
11	Kwamtoro	16 acres	Night camp
12	Mayamaya	20 acres	Night camp
13	Masange	20 acres	Night camp
14	Mjiro Chini	10 acres	Night camp
15	Ndaja	19 acres	Night camp
16	Kigwe to Bahi	46 km	Stock route
17	Kizota to Kigwe	15 km	Stock route
18	Dodoma	25 acres	Modern abattoir
19	MITC (Dodoma)	NA	Meat Industry Training Centre (within city)
20	Msagali	NA	Railway Siding/(Loading Ramp)
21	Dodoma R. Station (used by TLMP)	NA	Railway Siding (not rehabilitated under TLMP)
22	Kizota	NA	Railway Siding (not complete)
Kagera Region			
1	Lukole	22 acres	Secondary livestock market
2	Buzirayombo	12 acres	Primary livestock market and night camp

No	Name	Area occupied	Purpose (Description)
Kilimanjaro Region			
1	Kileo	200 acres	Primary Livestock Market
2	Makanya	2 acres	Primary Livestock Market
3	Munga	5 acres	Primary Livestock Market
4	Weruweru	60 acres	Secondary Livestock Market and holding ground
5	Bomang'ombe	10 acres	Veterinary checkpoint and night camp
Kigoma Region			
1	Buhigwe	25 acres	Border Livestock Market
2	Nguruka	25 acres	Primary Livestock Market
3	Uvinza	24 acres	Veterinary check point
5	Kakonko	21 acres	Primary Livestock Market
Mara Region			
1	Bitaraguru	16 acres	Primary livestock market
2	Kiabakari	18 acres	Primary livestock market and Night camp
3	Magena	30 acres	Border livestock market
4	Mtana	15 acres	Primary livestock market
5	Mugeta	15 acres	Primary livestock market
6	Randa	18 acres	Primary livestock market
7	Issenye	5 acres	Night camp
8	Kwibuse	5 acres	Night camp
9	Buhemba	20,000 acres	Holding ground
10	Kirumi	18 acres	Veterinary check point
Mwanza Region			
1	Bungulwa	15 acres	Primary Livestock Market and Night camp
2	Hungumalwa	20 acres	Primary Livestock Market and Night camp
3	Kasamwa	30 acres	Livestock Market
4	Misasi	15 acres	Primary Livestock Market
5	Nassa	15 acres	Primary Livestock Market
6	Nyamhongolo	4.5 acres	Secondary Livestock Market
7	Sengerema	15 acres	Livestock Market
8	Busisi	10 acres	Night Camp
9	Fella	10 acres	Night Camp
10	Ilungu	20 acres	Night camp
11	Nyamwilolelwa	4 acres	Cattle Dip
12	Ramadi	30 acres	Veterinary check points
13	Katoro	30 acres	Veterinary check points
14	Busolwa	10 acres	Night Camp
15	Sima (Igaka)	10 acres	Night Camp
16	Geita	10 acres	Night Camp
17	Nyarwanzaja	15 acres	Night Camp
18	Ngudu	20 acres	Night Camp
19	Nyanguge	20 acres	Night Camp
20	Igoma to Nyasamba	95 km	Stock route
21	Igoma to Lamadi	80 km	Stock route
22	Misasi to Malya	85 km	Stock route
23	Katoro to Isaka	70 km	Stock route
24	Fela	NA	Railway Siding
Singida Region			
1	Itaja	20 acres	Primary Livestock market
2	Itigi	20 acres	Primary Livestock market
3	Manyoni	20 acres	Primary Livestock market
4	Mtekente	10 acres	Primary Livestock market
5	Mtinko	10 acres	Primary Livestock market
6	Sekenke	20 acres	Secondary Livestock market and Night camp
7	Sepuka	30 acres	Livestock market
8	Usure	10 acres	Primary Livestock market and Night camp
9	Ikungi	10 acres	Primary Livestock market and Night camp
10	Iguguno	10 acres	Primary Livestock market and Night camp
11	Ulemo	15 acres	Primary Livestock market and Night camp
12	Ijanuka	7.5 acres	Primary Livestock market and Night camp

No	Name	Area occupied	Purpose (Description)
Singida Region (cont'd)			
13	Puma	10 acres	Night camp
14	Urughu	15 acres	Night camp
15	Isuna	10 acres	Night camp
16	Kindai	1,208 acres	Quarantine station /Holding ground
17	Mkwese	10,000 acres	Quarantine area/Holding ground
Shinyanga Region			
1	Bukundi	37 acres	Veterinary check point and Primary livestock market
2	Masabi	33 acres	Primary livestock market
3	Mhunze	30 acres	Secondary livestock market
4	Tinde	23 acres	Primary livestock market
5	Shanwa	30 acres	Primary livestock market
6	Bariadi	22 acres	Livestock market
7	Chibe	5,313 acres	Holding ground and Quarantine area
8	Isaka	24 acres	Night camp
9	Kahama LMU	2,810 acres	Night camp and Holding ground
10	Lalago	16 acres	Night camp
11	Mwamanimba	30 acres	Night camp
12	Nyasamba	16 acres	Veterinary check point
13	Shishiyu	10,360 acres	Holding ground and Quarantine station
14	Ushirombo	18 acres	Night camp
15	Isaka to Ushirombo	220 km	Stock route
16	Isaka	NA	Railway Siding
17	Usule	NA	Railway Siding
18	Shinyanga	NA	Railway Siding
19	Malya	NA	Railway Siding
Tabora Region			
1	Igunga	63 acres	Secondary livestock market
2	Ibologero	38 acres	Primary livestock market and Night camp
3	Ulaya	20 acres	Primary livestock market and Night camp
4	Ushirika	30 acres	Primary livestock market and Night camp
5	Ndala	30 acres	Primary livestock market and Night camp
6	Ipuli	10 acres	Secondary livestock market
7	Itobo	45 acres	Primary livestock market and Night camp
8	Sikonge	13 acres	Primary livestock market and Night camp
9	Urambo	30 acres	Primary livestock market and Night camp
10	Ngukumo	10 acres	Night camp
11	Kinyamwe	6,250 acres	Holding ground, Quarantine station and Night camp
12	Nata	40 acres	Holding ground, Quarantine area and Night camp
13	Tabora to Tutuo	45 km	Stock route
14	Ipuli to Kinyamwe	40 km	Stock route
15	Nanga to Ulaya	63 km	Stock route
16	Malende to Igogo	34 km	Stock route
17	Tabora	NA	Railway Siding
18	Urambo	NA	Railway Siding
19	Bukene	NA	Railway Siding
Tanga Region			
1	Korogwe	1365 acres	Secondary livestock market and Holding ground
2	Kibirashi	35 acres	Veterinary checkpoint and primary livestock market
3	Nderema	20 acres	Secondary livestock market and night camp
4	Sindeni	20 acres	Night camp
5	Mswaki	10 acres	Night camp
6	Kisangasa	15 acres	Night camp
7	Kibirashi to Korogwe	77 km	Stock route

Notes:

- Some sites are combination of: market & holding ground, market & night camp or check point & holding ground but were treated separately during rehabilitation/construction. In some cases, only one item was rehabilitated, say either a holding ground or market.
- The area given is only rough estimate, deduced by TLMP, from demarcations on the Map of Tanzania/aerial photographs. Official cadastral survey, on all the sites, will be conducted soon. $1 \text{ acre} = 0.4047 \text{ hectare (ha)}$ or $1 \text{ ha} = 2.4711 \text{ acres}$

List of Rehabilitated TRC Cattle Wagon Bogies (cwbs)

No	Wagon No	Date In	Date Out
1	40386	07/04/1997	19/09/1997
2	40312	26/11/1997	19/12/1997
3	40311	26/11/1997	19/12/1997
4	40302	16/03/1998	02/10/1998
5	40309	01/04/1998	01/05/1998
6	40378	01/05/1998	15/05/1998
7	40340	02/05/1998	28/08/1998
8	40374	07/09/1998	18/09/1998
9	40341	10/09/1998	19/09/1998
10	40371	16/09/1998	25/09/1998
11	40307	26/09/1998	02/10/1998
12	40360	02/10/1998	09/10/1998
13	40394	02/10/1998	23/10/1998
14	40337	06/10/1998	20/11/1998
15	40385	06/10/1998	20/11/1998
16	40373	29/10/1998	27/11/1998
17	40393	26/11/1998	04/12/1998
18	40316	02/12/1998	18/12/1998
19	40346	29/12/1998	05/01/1999
20	40300	14/12/1998	05/02/1999
21	40314	14/12/1998	05/02/1999
22	40338	04/02/1999	01/03/1999
23	40331	04/02/1999	05/03/1999
24	40326	04/03/1999	13/03/1999
25	40339	14/04/1999	01/05/1999
26	40392	01/04/1999	12/11/1999
27	40327	04/10/1999	26/11/1999
28	40318	15/11/1999	03/12/1999
29	40376	04/10/1999	17/12/1999
30	40343	29/05/2000	21/09/2000

No	Wagon No	Date In	Date Out
31	40320	29/05/2000	21/09/2000
32	40388	21/09/2000	16/10/2000
33	40353	21/09/2000	16/10/2000
34	40345	23/10/2000	08/12/2000
35	40379	23/10/2000	08/12/2000
36	40335	02/02/2001	04/03/2001
37	40397	15/12/2001	20/01/2001
38	40364	07/06/2001	20/07/2001
39	40348	07/06/2001	20/07/2001
40	40321	17/07/2001	03/08/2001
41	40358	17/07/2001	10/08/2001
42	40351	17/07/2001	03/09/2001
43	40325	09/08/2001	01/09/2001
44	40362	10/09/2001	21/09/2001
45	40303	10/09/2001	05/10/2001
46	40301	08/10/2001	26/10/2001
47	40304	08/10/2001	02/11/2001
48	40315	30/10/2001	09/11/2001
49	40356	30/10/2001	16/11/2001
50	40369	13/11/2001	11/01/2002
51	40361	13/11/2001	01/03/2002
52	40395	15/12/2001	20/01/2002
53	40355	27/12/2001	08/03/2002
54	40375	21/07/2003	22/08/2003
55	40388	09/09/2003	24/10/2003
56	40307	09/09/2003	24/10/2003
57	40320	29/10/2003	13/02/2004
58	40349	17/12/2003	19/03/2004
59	40366	02/01/2004	20/02/2004
60	40354	16/06/2004	30/07/2004

Note:

All Cattle Wagon Bogies (cwbs) were rehabilitated by Tanzania Railways Corporation (TRC) at Dar-es-salaam Central Railway Station.