

Table 5.3.9 Annual Budget of Distribution Sector - 10-Year Plan  
(Alternative 1)

DESCRIPTION/PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO. TOTAL BUDGET (1000R)	ANNUAL BUDGET															
			1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	1991-1995	1996-2000				
ND-1	MM-1 ESTABLISHMENT OF WHOLESALE MARKET (STUDY)	322	40	39												322		
	MM-1-1 STUDY ON ESTABLISHING WHOLESALE MARKET	210	210													210		
	MM-1-2 STUDY ON EXPANSION OF DISTRIBUTION VOLUME IN PAMP	33														33		
	MM-1-3 IMPLEMENTATION ON EXPANSION OF DISTRIBUTION VOLUME IN PAMP	79														79		
	MM-1-4 TRAINING STAFFS OF PAMP FOR IMPLEMENTATION OF THE PILOT		48	38													48	
	MM-2 PILOT WHOLESALE MARKET	384															384	
	MM-2-1 OPERATION OF PILOT WHOLESALE MARKET (SUPPORT BY CONSULTANT)	616															616	
	MM-2-2 DETAIL DESIGN ON WHOLESALE MARKET	17,100															17,100	
	MM-3 CONSTRUCTION AND OPERATION OF WHOLESALE MARKET	6,348															6,348	
	MM-3-1 CONSTRUCTION OF WHOLESALE MARKET	2,528															2,528	
	PHASE-1 MUTTRAH	1,844															1,844	
	PHASE-2 SEEB	1,978															1,978	
	MM-3-2 CONSTRUCTION OF WHOLESALE MARKET (SUPERVISION BY CONSULTANT)	126															126	
	PHASE-1 MUTTRAH	92															92	
	PHASE-2 SEEB	98															98	
	MM-3-3 SUBSIDY FOR REMUNERATION OF OPERATION IN WHOLESALE MARKET	1,975															1,975	
PHASE-1 MUTTRAH	600															600		
PHASE-2 SEEB	550															550		
MM-3-4 STUDY & P/D ON LOCAL WHOLESALE MARKET	629															629		
MM-3-5 CONSTRUCTION OF LOCAL WHOLESALE MARKET	6,486															6,486		
PHASE-1 SOKAR	1,844															1,844		
PHASE-2 SUR	1,844															1,844		
MM-3-6 CONSTRUCTION OF LOCAL WHOLESALE MARKET (SUPERVISION BY CONSULTANT)	1,399															1,399		
PHASE-1 SOKAR	322															322		
PHASE-2 SUR	92															92		
MM-3-7 SUBSIDY FOR REMUNERATION OF OPERATION IN LOCAL WHOLESALE MARKET	69															69		
PHASE-1 SOKAR	58															58		
PHASE-2 SUR	275															275		
MM-3-8 TRAINING STAFFS FOR OPERATION OF WHOLESALE MARKETS (SUPPORT)	474															474		
SUBTOTAL		18,328	243	48	111	459	2,893	689	4,576	4,576	928	3,861	3,658	14,672	248			
ND-2	MM-4 BASIC DATA COLLECTING PROGRAM (STUDY)	248	56	12												248		
	MM-4-1 BASIC DATA COLLECTING PROGRAM (STUDY)	88	98													88		
	MM-4-2 BASIC DATA COLLECTING PROGRAM (EQUIPMENT)	47	43													47		
	MM-4-3 PREPARATION & PUBLICATION OF SUPPLY AND DEMAND FORECAST	26	26													26		
	MM-4-5 INTRODUCTION FOR PRICING POLICY (STUDY)	26	26													26		
MM-5 PREPARATION & PUBLICATION OF SUPPLY AND DEMAND FORECAST (SUPPORT)	144															144		
MM-6 MEASURES FOR ADJUSTMENT OF SUPPLY AND DEMAND (STUDY)	98															98		
SUBTOTAL		444	114	98	128											444		
ND-3	MM-7 ESTABLISHMENT OF SHIPPING ORGANIZATION FOR FARMERS (STUDY)	188														188		
	MM-8 ESTABLISHMENT OF SHIPPING ORGANIZATION FOR FARMERS	1,868														1,868		
	MM-8-1 ESTABLISHMENT OF SHIPPING ORGANIZATION FOR FARMERS (SUPPORT)	98														98		
	MM-8-2 ESTABLISHMENT OF SHIPPING ORGANIZATION FOR FARMERS (EQUIPMENT)	1,000														1,000		
SUBTOTAL		1,276														1,276		
ND-4	MM-9 STRENGTH PROGRAM FOR MAIN DISTRIBUTION CHANNELS IN PAMP (STUDY)	468														468		
	MM-10 STRENGTH PROGRAM FOR MAIN DISTRIBUTION CHANNELS IN PAMP	9,609														9,609		
SUBTOTAL		10,077	190	239	3,203	3,203	3,203	6,889	4,576	4,576	928	3,861	3,658	14,672	248			
TOTAL	DEVELOPMENT BUDGET TOTAL	39,667	573	982	3,694	4,102	6,426	689	4,658	4,658	928	3,861	3,658	14,672	248			

Table 5.3.10 Annual Budget of Agricultural Produce Processing Sector  
- 10-Year Plan (Alternative 1)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000R)	ANNUAL BUDGET										1991	1991-1995	1996		
				1991	1992	1993	1994	1995	1996	1997	1998	1999	2000					
NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	A	5,100	100	2,500	2,500											5,100	
NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	A	1,410	148	438	486	150			18	120	18	120				1,134	276
NP-3	Establishment of Pickling and Vinegar-Processing Plant	A	1,782	132	1,492							13	155				1,614	168
NP-4	Establishment of Coconut-Processing Plant	A	2,625	1,390	152	412	200										2,625	
	Coconut Farm		2,100	1,390	130	180	220	200									2,100	
	Coconut-Processing Plant		525	22	252												525	
TOTAL	DEVELOPMENT BUDGET TOTAL		10,918	1,770	4,564	3,318	622	200	31	275	18	120				10,474	444	

Table 5.3.11 Annual Budget of Inter-Sectoral Project  
- 10-Year Plan (Alternative 1)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000R)	ANNUAL BUDGET										1991	1991-1995	1996		
				1991	1992	1993	1994	1995	1996	1997	1998	1999	2000					
NI-1	Integrated Agricultural Development Project in Nojd 1) Pilot Farm (50ha) 2) Main Development Project (450ha)	A	18,553	1,655	1,655	1,655	3,311	4,966	3,311								13,242	3,311
			14,908	1,655	1,655	1,655	3,311	4,966	3,311								11,587	3,311
NI-2	Improvement and Maintenance of MAF Facilities 1) Ministry Building 2) Office Building for Directorate General of Agriculture in 6 Regions	A	20,991	5,896	3,500	300	300	300	300	300	300	300	300	300	300	300	15,791	4,200
			5,191	2,595	2,596												5,191	
			7,800	2,500	2,300												7,800	
QI-1	Separate Consolidated Allocation for All Consultancies		3,000	300	300	300	300	300	300	300	300	300	300	300	300	300	4,800	4,200
QI-2	Citizen's Compensation against Natural Crisis Master Plan for Development of Date Palm Cultivation	A	3,000	300	300	300	300	300	300	300	300	300	300	300	300	300	1,500	1,500
			500														500	
TOTAL	DEVELOPMENT BUDGET TOTAL		41,144	8,450	7,951	5,555	4,411	5,066	4,411	4,411	1,100	1,100	1,100	1,100	1,100	1,100	32,333	3,811

Table 5.3.12 Regional Budget Total - 10-Year Plan (Alternative 1)

SECTOR	PROJECT NUMBER	NAME OF PROJECT/PROGRAM	TOTAL BUDGET (1000000)	REGION									
				MUSCAT	BATINAH	SHARQIYA	DARALHAYA	DHAHIRA	JANUBIYA	MUSANDAM			
Irrigation and Dam	NU-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	189,187	6,230	81,831	21,680	37,722	22,370	12,824	2,850			
	NU-2	Subsidy for New Irrigation System Project	31,250	820	17,130	4,045	4,380	2,819	1,880	318			
	NU-3	Leakage Research for Agricultural Water Use	250	10	128	28	35	23	8	6			
	NU-4	Research Dams	78,240	4,735	37,238	9,382	15,262	11,818	1,435	2,392			
	NU-5	Sub-surface (Underground) Dams	5,000		2,785	35	2,130	35	35				
	NU-6	Riffs	22,520	820	5,390	4,550	8,950	3,918					
	NU-7	Wells	5,100	22	1,383	1,376	954	1,318	33	22			
	NU-8	Springs	4,987										
	NU-9	Erosion Control and Protection of Agricultural Lands against Floods	8,510		685	550	4,100	50	525				
	NU-10	Survey and Monitoring	5,780	223	2,592	689	1,271	781	281	128			
Agricultural Research	NAR-1	Support for Agricultural Research Stations	19,200	180	9,240	2,650	2,185	1,422	2,985	180			
	NAR-2	Establishment of New Research Units and Laboratories	5,300		2,800	850	850	688	1,083				
	NAR-3	Development and Establishment of Experimental Farms and Nurseries	5,000		5,350	75			275				
	NAR-4	Forestry-Improvement Program	2,000	80	500	300	200	200	300	40			
	NAR-5	Establishment of Locust Survey and Control Unit	2,000	80	1,040	300	288	288	288	40			
	NAR-6	Soil Surveys	1,300			300	150	150	150	760			
Agricultural Extension	NAE-1	Improvement and Development of Extension Centers and Facilities	29,850	1,959	8,935	4,620	4,323	3,323	1,127	852			
	NAE-2	Establishment of Development Support Communication Center (OSCC)	3,520	172	840	581	737	543	283	284			
	NAE-3	Training of Researchers, Extension Staff and Statistics Staff	1,190										
	NAE-4	Intensive Extension Guidance Program	2,620	77	1,145	285	326	285	384	88			
	NAE-5	Collection and Organization of Agricultural Statistics	15,820	528	4,950	3,800	3,260	2,408	510	480			
	NAE-6	Agricultural Exhibitions and Festivals	2,060	62	1,050	309	208	206	124	41			
Livestock	NAL-1	National Project for Plant Protection and Aerial Spraying	7,300	225	4,950	1,050	825	675	525	150			
	NAL-2	Agricultural Technology Transfer to Farmers Project	19,200	300	5,400	1,400	1,188	800	788	200			
	NAL-3	Development and Improvement of Plant Quarantine	900										
	NAL-4	Rangeland Revegetation Project in Southern Region	72,520	2,265	15,478	6,824	8,258	7,295	30,869	1,551			
	NAL-5	Animal Health and Disease Control Project	29,387	732	6,995	2,680	2,443	4,328	10,973	927			
	NAL-6	Livestock Extension Development Project	632	9	241	38	38	36	271	9			
	NAL-7	Livestock Research Development Project	8,050		2,445								
	NAL-8	Livestock Marketing Improvement Project	7,884	91	198	180	1472	188	188	6,389	13		
	NAL-9	Livestock Input Company Project	1,359	983									
	NAL-10	Small Farm Development Support Project	21,855	332	5,027	3,424	3,688	2,547	6,130	533			
Distribution	ND-1	Establishment of Wholesale Market	30,087	10,372	6,235	2,843	2,745	3,887	4,694	91			
	ND-2	Supply and Demand Forecast of Agricultural Produce	10,326	7,243	2,463	1,882	1,682	2,468	2,738				
	ND-3	Establishment of Shipping Organization for Farmers	444	444									
	ND-4	Fertilization of Pamp	10,077	2,520	3,371	997	899	455	1,748	91			
Agricultural Produce Processing	NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	10,318	1,460	4,009	765	1,239	518	2,779	182			
	NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Dates, Dates and Tomatoes	5,100	204	2,652	765	714	512	153	182			
	NP-3	Establishment of Pickling and Vinegar-Processing Plant	1,410	443	486		485						
	NP-4	Establishment of Coconut-Processing Plant	1,782	807	891		84						
Inter-Sectoral	NI-1	Integrated Agricultural Development Project in Nadj	41,144	5,655	7,282	2,900	2,874	2,410	18,451	1,482			
	NI-2	Improvement and Maintenance of MAF Facilities	16,553										
	NI-3	Artificial Rainfall Project	20,591	5,511	5,418	2,450	2,370	2,058	1,788	1,410			
	OI-1	Citizen's Compensation against Natural Crisis	3,000	120	1,560	450	428	388	388	38	62		
	OI-2	Master Plan for Development of Date Palm Cultivation	950	24	312	98	84	60	60	18	12		
	Total		493,860	29,960	141,459	44,809	61,686	43,853	75,586	7,578			

Table 5.3.13 Regional Budget of Irrigation and Dam Sector  
- 10-Year Plan (Alternative 1)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RD)	REGION						
				MUSCAT	BATINAH	SHARQIYA	DAKHILIYA	HADRAMUT	JANUBIYA	MUSANDAM
NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	A	26,370		14,460	2,040	2,940	2,310	4,620	
	Study Phase(P/S,F/S)		1,700		960	240	240	140	120	
	Pilot Project		24,670		13,500	1,800	2,700	2,170	4,500	
NW-2	Subsidy for New Irrigation System Project for 25,000ha	A	31,250	620	17,190	4,060	4,380	2,810	1,800	310
NW-3	Legal Framework for Agricultural Water Use	A	250	10	123	33	35	25	8	6
NW-4	Recharge Dams	A	79,240	4,735	37,238	8,362	13,262	11,816	1,435	2,392
NW-4-1	Groundwater-Recharge Scheme									
	Study Phase		5,940	400	3,100	600	1,020	520	100	200
	Construction Phase		59,400	4,000	31,000	6,000	10,200	5,200	1,000	2,000
NW-4-2	Maintenance and Improvement of Existing and Newly Constructed Dams		7,400	295	2,988	712	1,992	996	285	142
NW-4-3	Recharged Water Effective Use Pilot Project(Study)		500	50	150	50	50	100	50	50
NW-4-4	Identification of New Groundwater-Recharge Schemes		6,000			1,000		6,000		
NW-5	Sub-Surface (Underground) Dams	A	5,000		2,765	35	2,130	35	35	
	Reconnaissance Study		75		35	10	10	10	10	
	Preliminary Study		150		58	25	25	25	25	
	Feasibility Study		300		202	100	100			
	Pilot Project(Construction)		4,325		2,425		1,900			
	Observation and Monitoring		150		55		95			
NW-6	Afajaj	A	22,520	620	5,390	4,550	3,050	3,910		
NW-6-1	Repair and Maintenance of Afajaj		12,000	600	2,640	1,800	4,560	2,400		
NW-6-2	Distribution System Improvement Pilot Project in Oasis(Study)		1,500		300	300	600	300		
NW-6-3	Improvement and Maintenance of Major Afajaj									
	Study		1,520	20	452	450	398	210		
	Construction		7,500		2,000	2,000	2,500	1,000		
NW-7	Wells	A	5,100	22	1,383	1,276	954	1,310	33	22
NW-7-1	Subsidy for Repair of Existing Open Wells		1,100	22	563	176	154	110	33	22
NW-7-2	Assistant Wells for Afajaj		4,000		800	1,200	800	1,200		
NW-8	Springs	A	4,087						4,087	
NW-8-1	Improvement of Springs		3,500						3,500	
NW-8-2	Annual Maintenance of Open Channel for Spring		587						587	
NW-9	Erosion Control and Protection of Agricultural Land against Floods	A	6,510		985	650	4,700	50	525	
	Study Phase		410		185	50	100	50	25	
	Construction Phase		6,100		500	500	4,600	500	500	
NW-10	Survey and Monitoring	A	5,780	223	2,582	669	1,271	704	201	120
NW-10-1	Long-term Plan for Aerial Photography and Ortho-photo Mapping		2,200	85	1,147	325	307	222	63	51
NW-10-2	Establishment and Operation of Hydrological Monitoring Network for Recharge Dams		3,580	138	1,445	344	664	482	138	69
TOTAL	DEVELOPMENT BUDGET TOTAL		186,107	6,230	81,631	21,680	37,722	82,970	12,824	2,850

Table 5.3.14 Regional Budget of Agricultural Research Sector  
- 10-Year Plan (Alternative 1)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RD)	REGION						
				FUSCAT	BATINAH	SHARQIYADAKHLIYAD	DHAHIRA	JANUBIYAD	MUSANDAM	
NAR-1	SUPPORT FOR AGRICULTURAL RESEARCH STATIONS		5,300		2,000	850	350	600	1,200	
NAR-1-1	AGRICULTURAL RESEARCH FACILITIES AT RUMAIS	A	1,100		1,100					
NAR-1-2	AGRICULTURAL RESEARCH FACILITIES AT JEMMAH	A	850				350			
NAR-1-3	AGRICULTURAL RESEARCH FACILITIES AT SALALAH	A	1,000						1,000	
NAR-1-4	AGRICULTURAL RESEARCH FACILITIES AT SOHAR	A	900		900					
NAR-1-5	AGRICULTURAL RESEARCH FACILITIES AT SHARQIYA	A	850			850				
NAR-1-6	AGRICULTURAL RESEARCH FACILITIES AT DHAHIRA	A	600					600		
NAR-2	ESTABLISHMENT OF NEW RESEARCH UNITS AND LABORATORIES		5,600		5,250		75		275	
NAR-2-1	AGRICULTURAL MACHINERY RESEARCH UNIT AT RUMAIS	A	800		800					
NAR-2-2	TOXICOLOGY LABORATORY (RUMAIS)	A	300		300					
NAR-2-3	SEED AND TUBER PRODUCTION RESEARCH UNIT (RUMAIS)	A	650		650					
NAR-2-4	CENTRAL SOIL, PLANT AND WATER ANALYSIS LABORATORY (RUMAIS)	A	300		300					
NAR-2-5	LIBRARY AND DOCUMENTATION CENTER (RUMAIS)	A	250		250					
NAR-2-6	PLANT WATER REQUIREMENT DETERMINATION UNIT (SALALAH)	A	100						100	
NAR-2-7	MEDICAL AND PERFUME PLANT RESEARCH UNIT (SALALAH)	A	75						75	
NAR-2-8	DISEASE AND PEST FORECASTING UNIT (RUMAIS)	A	100		100					
NAR-2-9	SALT TOLERANT PLANTS AND HALOPHYTES RESEARCH UNITS (RUMAIS)	A	650		650					
NAR-2-10	HONEY BEE LABORATORY (RUMAIS)	A	200		200					
NAR-2-11	HONEY BEE RESEARCH UNIT (SALALAH)	A	100						100	
NAR-2-12	HONEY BEE RESEARCH UNIT (JEMMAH)	A	75				75			
NAR-2-13	DATE PALM RESEARCH UNIT (RUMAIS)	A	1,500		1,500					
NAR-3	DEVELOPMENT AND ESTABLISHMENT OF EXPERIMENTAL FARMS AND NURSERIES		2,000		450	300	550	250	350	100
NAR-3-1	DEVELOPMENT OF ARABIC COFFEE EXPERIMENTAL FARM IN SALALAH	A	200						200	
NAR-3-2	DEVELOPMENT OF NURSERIES AT RUMAIS AND BARKA	A	300		300					
NAR-3-3	DEVELOPMENT OF NURSERIES AT SOHAR	A	150		150					
NAR-3-4	DEVELOPMENT OF NURSERIES IN INTERIOR	A	400				400			
NAR-3-5	DEVELOPMENT OF NURSERIES IN SOUTHERN REGION	A	150						150	
NAR-3-6	DEVELOPMENT OF EXPERIMENTAL FARM AT WADI QURIYAT	A	150					150		
NAR-3-7	DEVELOPMENT OF EXPERIMENTAL FARM AT MUSANDAM	A	100							100
NAR-3-8	DEVELOPMENT OF EXPERIMENTAL FARM AT SHARQIYA	A	300			300				
NAR-3-9	DEVELOPMENT OF EXPERIMENTAL FARM AT DHAHIRA	A	250					250		
NAR-4	FORESTRY-IMPROVEMENT PROGRAM	A	2,000	80	500	300	280	200	600	40
NAR-5	ESTABLISHMENT OF LOCUST SURVEY AND CENTRAL UNIT (RUMAIS, ALL REGION)	A	2,000	80	1,040	300	280	200	60	40
NAR-6	SOIL SURVEYS	A	1,300			300	150	150	700	
TOTAL	DEVELOPMENT BUDGET TOTAL		18,200	160	9,240	2,050	2,185	1,400	2,985	180

Table 5.3.15 Regional Budget of Agricultural Extension Sector  
- 10-Year Plan (Alternative 1)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000R)	REGION						
				MUSCAT	BATINAH	SHARQIYAD	AKHLIYAD	HAHIRA	JANUBIYAH	MUSANDAM
NAE-1	IMPROVEMENT AND DEVELOPMENT OF EXTENSION CENTERS AND FACILITIES		3,520	172	940	561	737	643	293	284
NAE-1-1	ESTABLISHMENT OF EXTENSION CENTERS IN REMOTE AREA	A	400				50	150		100
NAE-1-2	IMPROVEMENT OF EXTENSION CENTER FACILITIES	A	1,620	72	540	211	237	243	183	84
NAE-1-3	DEVELOPMENT OF AGRICULTURAL TECHNOLOGY INFORMATION UNITS (ATIU)	A	1,500	100	300	300	350	250	100	100
NAE-2	ESTABLISHMENT OF DEVELOPMENT SUPPORT COMMUNICATION CENTER (DSCC)	A	1,100	1,100						
NAE-3	TRAINING OF RESEARCHERS, EXTENSION STAFF AND STATISTICS STAFF	A	2,520	77	1,145	265	326	285	334	88
NAE-4	INTENSIVE EXTENSION GUIDANCE PROGRAM		15,820	520	4,850	3,820	3,260	2,400	510	480
NAE-4-1	SUPPORTING KEY FARMER EXTENSION PROGRAM	A	3,000	100	1,400	450	420	300	270	60
NAE-4-2	BATE PALM REHABILITATION & IMPROVEMENT PROGRAM	A	11,820	400	3,000	3,200	2,700	2,000	120	400
NAE-4-3	PROVISION OF INPUTS FOR EXPERIMENTAL PURPOSES	A	1,000	20	450	150	140	100	120	20
TOTAL	DEVELOPMENT BUDGET TOTAL		27,850	1,359	6,835	4,626	4,323	3,328	1,127	852

Table 5.3.16 Regional Budget of Agricultural Production Sector  
- 10-Year Plan (Alternative 1)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000R)	REGION						
				MUSCAT	BATINAH	SHARQIYAD	AKHLIYAD	HAHIRA	JANUBIYAH	MUSANDAM
NAR-1	COLLECTION AND ORGANIZATION OF AGRICULTURAL STATISTICS		2,060	62	1,030	309	288	205	124	41
NAR-1-1	AGRICULTURAL CENSUS	A	1,400	42	700	210	176	140	84	28
NAR-1-2	ANNUAL UPDATE OF IMPORTANT AGRICULTURAL STATISTICS	A	660	20	330	99	92	66	40	13
NAR-2	AGRICULTURAL EXHIBITION AND FESTIVAL		1,400	971	71	71	71	71	71	71
NAR-2-1	INTERNATIONAL AGRICULTURE AND FOOD EXHIBITION	A	900	900						
NAR-2-2	DOMESTIC AGRICULTURAL FESTIVAL	A	500	71	71	71	71	71	71	71
NAR-3	NATIONAL PROJECT FOR PLANT PROTECTION AND AERIAL SPRAY	F	7,500	725	4,800	1,050	825	675	525	150
NAR-4	AGRICULTURAL TECHNOLOGY TRANSFER PROJECT TO FARMERS	A	10,000	300	5,400	1,400	1,100	900	700	200
NAR TOTAL			20,960	1,558	10,551	2,330	2,285	1,852	1,420	463
NAR-1	DEVELOPMENT & IMPROVEMENT OF PLANT QUARANTINE	A	900	300				200	400	
TOTAL	DEVELOPMENT BUDGET TOTAL		21,860	1,858	10,551	2,330	2,285	2,052	1,920	463

Table 5.3.17 Regional Budget of Livestock Sector  
- 10-Year Plan (Alternative 1)

Number of Project	Name of the Project	Project Period	Region			Total
			Muscat	Batinah	Sharqiyah	
NLL-1	Rangeland Revegetation Project in Southern Region					3,552
NLL-1-1	① Establishment of Rangeland Management	2				352
NLL-1-2	② Grazing Control	10				3,200
NLL-2	Animal Health & Disease Control Project		732	8,985	2,930	2,443
NLL-2-1	① Development of New Quarantines	5	10	205		1,365
NLL-2-2	② Animal Clinics Improvements	5	188	33	37	56
NLL-2-3	③ Laboratory Development	3		486		338
NLL-2-4	④ CAPP Vaccine Development	10	557	4,640	2,221	1,856
NLL-2-5	⑤ National Vaccination	10	165	1,375	660	550
NLL-2-6	⑥ Supplies of Veterinary Equipment	10				1,925
NLL-2-7	⑦ Brucellosis Control in South	10				1,236
NLE-1	Livestock Extension Development		9	241	36	271
NLE-1-1	① Extension Method Improvement	10	9	75	36	105
	- Demonstration of Using Equipment					
	- Visual Extension					
	- Establishment of Demonstration Unit					
NLE-1-2	② Training Center Development			166		166
NLR-1	Livestock Research Development			2,446		2,446
NLR-1-1	① Development of Livestock Research Centers	10		1,500	1,473	2,131
NLR-1-2	② Research Centers Management Consultancy	5		946	473	1,500
NLM-1	Livestock Marketing Improvement Project		91	196	106	6,938
NLM-1-1	① Company for Livestock Products	7				1,716
NLM-1-2	② Cattle Fattening	5				979
NLM-1-3	③ Cut Meat Processing	3				537
NLM-1-4	④ Milk Collecting and Processing	6		65	32	1,031
NLM-1-5	⑤ Hides and Skins Development	3	73	26	26	79
NLM-1-6	⑥ Cattle Destocking Subsidy	5				2,500
NLM-1-7	⑦ Marketing Promotion	5	13	105	50	146
NLL-3	Livestock Input Company Project		2	983	376	1,359
NLL-4	Small Farm Development Support Project		382	5,027	3,424	3,936
NLL-4-1	① Smallholder Poultry Production	5		1,842	1,895	2,302
NLL-4-2	② Intensive Livestock Production	10	382	3,185	1,529	1,274
NLL-4-3	③ A.I. Services for Dairy Cow					30
NLL-5	Livestock Specialized Services		69	575	276	276
NLA-1-1	① Livestock Census	2	31	262	126	126
NLL-5-1	② National Disease Survey	10	3	28	13	13
NLM-2	Marketing Survey	1	4	38	17	50
NLL-5-2	④ Consultancy Services (Study)	10	30	250	120	120
	Total		2,356	15,470	6,824	8,258
	Percentage		3.1	21.3	9.4	11.4
						10.1
						42.5
						2.1
						100

Table 5.3.18 Regional Budget of Distribution Sector - 10-Year Plan  
(Alternative 1)

DESCRIP PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RO)		REGION		SUBTOTAL													
			FUSCAT	RATINASHARRIYADAKMI	LYADAHHARA	IRAJAKUB		LYADAHHARA	IRAJAKUB	LYADAHHARA	IRAJAKUB									
ND-1		A	322	322																
NM-1	ESTABLISHMENT OF WHOLESALE MARKET (STUDY)																			
NM-1-1	STUDY ON ESTABLISHING WHOLESALE MARKET		218	218																
NM-1-2	STUDY ON EXPANSION OF DISTRIBUTION VOLUME IN PAMAP		33	33																
NM-1-3	IMPLEMENTATION ON EXPANSION OF DISTRIBUTION VOLUME IN PAMAP																			
NM-1-4	TRAINING STAFFS OF PAMAP FOR IMPLEMENTATION OF THE PILOT		70	70																
NM-2	PILOT WHOLESALE MARKET		984	984																
NM-2-1	OPERATION OF PILOT WHOLESALE MARKET (SUPPORT BY CONSULTANT)		288	288																
NM-2-2	DETAIL DESIGN ON WHOLESALE MARKET		316	316																
NM-3	CONSTRUCTION AND OPERATION OF WHOLESALE MARKET		17,188	6,917	2,468	1,692	1,692	2,468	2,468											
NM-3-1	CONSTRUCTION OF WHOLESALE MARKET		6,348	4,378																
PHASE-1	MUTIRAH		2,526	2,526																
PHASE-2	SEEB		1,844	1,844																
PHASE-3	SALALAH		1,978																	
NM-3-2	CONSTRUCTION OF WHOLESALE MARKET (SUPERVISION BY CONSULTANT)		316	218																
PHASE-1	MUTIRAH		126	126																
PHASE-2	SEEB		92	92																
PHASE-3	SALALAH		98																	
NM-3-3	SUBSIDY FOR REMUNERATION OF OPERATION IN WHOLESALE MARKET		1,975	1,358																
PHASE-1	MUTIRAH		808	808																
PHASE-2	SEEB		558	558																
PHASE-3	SALALAH		625																	
NM-3-4	STUDY & D/D ON LOCAL WHOLESALE MARKET		629		178	135	135	178												
NM-3-5	CONSTRUCTION OF LOCAL WHOLESALE MARKET		6,486		1,844	1,398	1,398	1,844												
PHASE-1	SOHAR		1,844																	
PHASE-2	SUR		1,398																	
NM-3-6	CONSTRUCTION OF LOCAL WHOLESALE MARKET (SUPERVISION BY CONSULTANT)		322		92	89	89	92												
PHASE-1	SOHAR		92																	
PHASE-2	SUR		89																	
PHASE-3	IBRI		92																	
NM-3-7	SUBSIDY FOR REMUNERATION OF OPERATION IN LOCAL WHOLESALE MARKET		558		275	275	275													
PHASE-1	SOHAR		275																	
PHASE-2	SUR		275																	
NM-3-8	TRAINING STAFFS FOR OPERATION OF WHOLESALE MARKETS (SUPPORT)		474	79	79	79	79	79												
SUBTOTAL			18,326	7,243	2,468	1,692	1,692	2,468	2,468											
NM-4	BASIC DATA COLLECTING PROGRAM		240	240																
NM-4-1	BASIC DATA COLLECTING PROGRAM (STUDY)		38	38																
NM-4-2	BASIC DATA COLLECTING PROGRAM (EQUIPMENT)		43	43																
NM-4-3	BASIC DATA COLLECTING PROGRAM (SUPPORT BY CONSULTANT)		47	47																
NM-4-4	PREPARATION & PUBLICATION OF SUPPLY AND DEMAND FORECAST		29	29																
NM-4-5	INTRODUCTION FOR PRICING POLICY (STUDY)		26	26																
NM-5	PREPARATION & PUBLICATION OF SUPPLY AND DEMAND FORECAST (SUPPORT)		144	144																
NM-6	MEASURES FOR ADJUSTMENT OF SUPPLY AND DEMAND (STUDY)		69	69																
SUBTOTAL			444	444																
NM-7	ESTABLISHMENT OF SHIPPING ORGANIZATION FOR FARMERS (STUDY)		158	21	53	21	21	21												
NM-8	ESTABLISHMENT OF SHIPPING ORGANIZATION FOR FARMERS		1,062	143	343	143	143	143												
NM-8-1	ESTABLISHMENT OF SHIPPING ORGANIZATION FOR FARMERS (SUPPORT)		58	10	10	10	10	10												
NM-8-2	ESTABLISHMENT OF SHIPPING ORGANIZATION FOR FARMERS (EQUIPMENT)		1,008	133	333	133	133	133												
SUBTOTAL			1,228	184	386	184	184	184												
NM-9	STRENGTH PROGRAM FOR MAIN DISTRIBUTION CHANNELS IN PAMAP (STUDY)		488	117	157	45	45	45												
NM-10	STRENGTH PROGRAM FOR MAIN DISTRIBUTION CHANNELS IN PAMAP		9,688	2,403	3,214	958	657	431												
SUBTOTAL			10,877	2,520	3,371	805	805	455												
TOTAL	DEVELOPMENT BUDGET TOTAL		10,867	10,371	5,235	2,642	2,642	3,887	4,991											



Table 5.3.19 Regional Budget of Agricultural Produce Processing Sector  
- 10-Year Plan (Alternative 1)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RO)	REGION						
				MUSCAT	BATINA	SHARQIYA	ADAKHLIYA	DHAKHLIYA	JANUBIYA	MUSANDAQ
NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	A	5,100	204	2,652	765	714	510	153	102
NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	A	1,410	449	466		495			
NP-3	Establishment of Pickling and Vinegar-Processing Plant	A	1,782	607	891		84			
NP-4	Establishment of Coconut-Processing Plant	A	2,626						2,626	
	Coconut Farm		2,100						2,100	
	Coconut-Processing Plant		526						526	
TOTAL	DEVELOPMENT BUDGET TOTAL		10,918	1,460	4,009	765	1,293	510	2,779	182

Table 5.3.20 Regional Budget of Inter-Sectoral Projects  
- 10-Year Plan (Alternative 1)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RO)	REGION						
				MUSCAT	BATINA	SHARQIYA	ADAKHLIYA	DHAKHLIYA	JANUBIYA	MUSANDAQ
NI-1	Integrated Agricultural Development Project in Nejd 1) Pilot Farm (50ha) 2) Main Development Project (450ha)	A	16,553						16,553	
			1,655						1,655	
			14,898						14,898	
NI-2	Improvement and Maintenance of MAF Facilities 1) Ministry Building 2) Office Building for Directorate General of Agriculture in 6 Regions 3) Separate Consolidated Allocation for All Consultancies	A	20,991	5,511	5,410	2,450	2,370	2,050	1,790	1,410
			5,191	5,191						
			7,800		1,250	1,250	1,250	1,250	1,550	1,250
			8,080	320	4,160	1,200	1,120	800	240	150
OI-1	Citizen's Compensation against Natural Crisis	A	3,000	120	1,500	450	420	300	90	50
OI-2	Master Plan for Development of Date Palm Cultivation	A	600	24	312	90	84	60	18	12
TOTAL	DEVELOPMENT BUDGET TOTAL		41,144	5,655	7,292	2,930	2,874	2,410	18,451	1,482

Table 5.3.21 Budget Total - 10-Year Plan (Alternative 2)

SECTOR	PROJECT NUMBER	NAME OF PROJECT/PROGRAM	TOTAL BUDGET (1000RO)
Irrigation and Dam			259,922
	NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	42,090
	NW-2	Subsidy for New Irrigation System Project	37,500
	NW-3	Legal Framework for Agricultural Water Use	250
	NW-4	Recharge Dams	81,645
	NW-5	Sub-surface (Underground) Dams	5,000
	NW-6	Aflaj	59,020
	NW-7	Wells	18,000
	NW-8	Springs	4,087
	NW-9	Erosion Control and Protection of Agricultural Land against Floods	6,510
	NW-10	Survey and Monitoring	5,820
Agricultural Research			18,200
	NAR-1	Support for Agricultural Research Stations	5,300
	NAR-2	Establishment of New Research Units and Laboratories	5,600
	NAR-3	Development and Establishment of Experimental Farms and Nurseries	2,000
	NAR-4	Forestry-Improvement Program	2,000
	NAR-5	Establishment of Locust Survey and Central Unit	2,000
	NAR-6	Soil Surveys	1,300
			23,050
Agricultural Extension	NAE-1	Improvement and Development of Extension Centers and Facilities	3,520
	NAE-2	Establishment of Development Support Communication Center(DSCC)	1,190
	NAE-3	Training of Researchers, Extension Staff and Statistics Staff	2,520
	NAE-4	Intensive Extension Guidance Program	15,820
			21,860
Agricultural Production	NAA-1	Collection and Organization of Agricultural Statistics	2,060
	NAA-2	Agricultural Exhibitions and Festivals	1,400
	NAA-3	National Project for Plant Protection and Aerial Spraying	7,500
	NAA-4	Agricultural Technology Transfer to Farmers Project	10,000
	NAQ-1	Development and Improvement of Plant Quarantine	900
			74,576
Livestock	NLL-1	Rangeland Revegetation Project in Southern Region	3,552
	NLL-2	Animal Health and Disease Control Project	31,423
	NLE-1	Livestock Extension Development Project	632
	NLR-1	Livestock Research Development Project	6,050
	NLM-1	Livestock Marketing Improvement Project	7,604
	NLL-3	Livestock Input Company Project	1,359
	NLL-4	Small Farm Development Support Project	21,655
	NLL-5	Livestock Specialized Services Program	2,301
			30,067
Distribution	ND-1	Establishment of Wholesale Market	18,326
	ND-2	Supply and Demand Forecast of Agricultural Produce	444
	ND-3	Establishment of Shipping Organization for Farmers	1,220
	ND-4	Fortification of PAMAP	10,077
			10,918
Agricultural Produce Processing	NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	5,100
	NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	1,410
	NP-3	Establishment of Pickling and Vinegar-Processing Plant	1,782
	NP-4	Establishment of Coconut-Processing Plant	2,626
			41,144
Inter-Sectoral	NI-1	Integrated Agricultural Development Project in Nejd	16,553
	NI-2	Improvement and Maintenance of WAF Facilities	20,991
	NI-3	Artificial Rainfall Project	
	OI-1	Citizen's Compensation against Natural Crisis	3,000
	OI-2	Master Plan for Development of Date Palm Cultivation	600
Total			479,737



Table 5.3.23 Annual Budget of Irrigation and Dam Sector  
- 10-Year Plan (Alternative 2)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RO)	ANNUAL BUDGET REQUIREMENT										1991 - 1995	1996 - 2000
				1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		
NW-1	Improvement of Irrigation System and Centrally Controlled Water-Distribution System Study Phase(P.S.F.S) Pilot Project	A	42,099	620	900	3,800	5,350	8,940	5,190	4,740	4,650	4,520	3,060	19,300	22,290
			2,420	320	480	300	240	240	240	240	180	120	80	1,580	840
			39,679	300	500	3,500	5,120	7,700	4,950	4,500	4,500	3,000	18,220	21,450	
NW-2	Subsidy for New Irrigation System Project for 30,000ha	A	37,500	2,500	2,500	3,750	3,750	3,750	3,750	3,750	5,000	5,000	16,250	21,250	
NW-3	Legal Framework for Agricultural Water Use	A	250	45	45								40	170	30
NW-4	Recharge Dams		81,645	8,350	9,150	9,450	9,600	11,475	7,700	8,575	7,550	5,175	4,620	40,825	33,620
NW-4-1	Groundwater-Recharge Scheme		6,120	750	750	750	750	750	800	800	800	800	350	3,750	2,370
	Construction Phase		61,200	6,800	7,400	7,500	7,500	9,200	5,800	6,400	5,500	3,000	2,500	38,200	23,000
	Maintenance and Improvement of Existing and Newly Constructed Dams		7,825	250	250	450	600	775	300	1,025	1,100	1,225	1,250	2,325	5,500
NW-4-3	Recharged Water Effective Use Pilot Project(Study)		500	50	50	50	50	50	50	50	50	50	50	250	250
NW-4-4	Identification of New Groundwater-Recharge Schemes		5,000	700	700	700	700	700	700	500	500	500	500	3,500	2,500
NW-5	Sub-Surface (Underground) Dams	A	5,000	75	100	100	100	1,965	1,215	1,240	15	15	15	2,500	2,500
	Reconnaissance Study		75	75										75	
	Preliminary Study		150	100	50									150	
	Feasibility Study		300											300	
	Pilot Project(Construction)		4,325					1,300	1,200	1,225				1,300	2,425
	Observation and Monitoring		150		30	30	30	15	15	15	15	15	15	75	75
NW-6	Afija	A	59,020	5,150	6,270	6,110	6,970	6,070	6,070	6,070	6,070	5,570	5,570	29,670	29,350
NW-6-1	Repair and Maintenance of Afija		49,000	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	24,000	24,000
NW-6-2	Distribution System Improvement Pilot Project in Oasis(Study)		1,500	150	150	150	150	150	150	150	150	150	150	750	750
NW-6-3	Improvement and Maintenance of Major Afija Study		1,520	300	320	160	120	120	120	120	120	120	120	920	920
	Construction		8,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	500	500	4,000	4,000
NW-7	Wells	A	18,000	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	9,000	9,000
NW-7-1	Subsidy for Repair of Existing Open Wells		6,000	600	600	600	600	600	600	600	600	600	600	3,000	3,000
NW-7-2	Assistant Wells for Afija		12,000	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	6,000	6,000
NW-8	Springs	A	4,087	375	375	378	416	430	400	405	407	446	460	1,969	2,118
NW-8-1	Improvement of Springs		3,500	350	350	350	350	350	350	350	350	350	350	1,750	1,750
NW-8-2	Annual Maintenance of Open Channel for Spring		587	28	25	28	66	80	50	55	57	96	110	219	368
NW-9	Erosion Control and Protection of Agricultural Land against Floods	A	6,510	70	760	1,040	1,030	970	550	550	540	500	500	3,370	2,640
	Study Phase		410	70	50	50	50	50	50	50	50	50	50	270	140
	Construction Phase		6,100	710	990	990	980	920	500	500	500	500	500	3,600	2,500
NW-10	Survey and Monitoring	A	5,828	1,197	1,137	1,282	332	316	316	316	308	308	308	4,264	1,559
NW-10-1	Longterm Plan for Aerial Photography and Ortho-Photo Mapping		2,200	230	217	217	217	217	217	217	217	216	216	1,116	1,092
NW-10-2	Establishment and Operation of Hydrological Monitoring Network for Recharge Dams		3,628	347	920	1,065	115	99	99	98	92	92	92	3,148	474
TOTAL	DEVELOPMENT BUDGET TOTAL		259,322	20,132	23,117	27,535	29,530	34,936	23,991	27,446	26,120	23,474	21,373	136,518	124,404

Table 5.3.24 Comparison of Full Plan with 'Alternative 2' Plan  
In Irrigation and Dam Sector

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	FULL PLAN			ALTERNATIVE(2)		
		VOLUME	UNIT	TOTAL BUDGET (1000RO)	VOLUME	UNIT	TOTAL BUDGET (1000RO)
NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System			60,990			42,090
	Study Phase	21	Studies	2,420	21	Studies	2,420
	Pilot Project	6,500	ha	58,570	4,100	ha	39,670
NW-2	Subsidy for New Irrigation System Project for 30,000ha	30,000	ha	37,500	30,000	ha	37,500
NW-3	Legal Framework for Agricultural Water Use	3	Studies	250	3	Studies	250
NW-4	Recharge Dams			86,633			81,645
NW-4-1	Groundwater-Recharge Scheme						
	Study Phase	42	Dams	6,520	39	Dams	6,120
	Construction Phase	42	Dams	65,200	39	Dams	61,200
NW-4-2	Maintenance and Improvement of Existing and Newly Constructed Dams	1	Item	8,413	1	Item	7,825
NW-4-3	Recharged Water Effective Use Pilot Project(Study)	4	Studies	500	4	Studies	500
NW-4-4	Identification of New Groundwater-Recharge Schemes	1	Item	6,000	1	Item	6,000
NW-5	Sub-Surface (Underground) Dams			5,000			5,000
	Reconnaissance Study	1	Study	75	1	Study	75
	Preliminary Study	1	Study	150	1	Study	150
	Feasibility Study	2	Study	300	2	Study	300
	Pilot Project(Construction)	2	Dam	4,325	2	Dam	4,325
	Observation and Monitoring	1	Item	150	1	Item	150
NW-6	Aflaj			113,420			59,020
NW-6-1	Repair and Maintenance of Aflaj	3,000	Aflaj	90,000	1,600	Aflaj	48,000
NW-6-2	Distribution System Improvement Pilot Project in Oasis(Study)	10	Studies	1,500	10	Studies	1,500
NW-6-3	Improvement and Maintenance of Major Aflaj						
	Study	40	Studies	1,920	30	Studies	1,520
	Construction	40	Aflaj	20,000	16	Aflaj	8,000
NW-7	Wells			30,240			18,000
NW-7-1	Subsidy for Repair of Existing Open Wells	10,240	Wells	10,240	6,000	Wells	6,000
NW-7-2	Assistant Wells for Aflaj	500	Wells	20,000	300	Wells	12,000
NW-8	Springs			5,914			4,087
NW-8-1	Improvement of Springs	300	Springs	5,250	200	Springs	3,500
NW-8-2	Annual Maintenance of Open Channel for Spring	1	Item	664	1	Item	587
NW-9	Erosion Control and Protection of Agricultural Land against Floods			11,510			6,510
	Study Phase	15	Studies	410	15	Studies	410
	Construction Phase	19	Projects	11,100	9	Projects	6,100
NW-10	Survey and Monitoring			5,940			5,820
NW-10-1	Long-term Plan for Areal Photography and Ortho-photo Mapping	1	Item	2,200	1	Item	2,200
NW-10-2	Establishment and Operation of hydrological Monitoring Network for Recharge Dams	1	Item	3,740	1	Item	3,620
TOTAL	DEVELOPMENT BUDGET TOTAL			357,397			259,922

Table 5.3.25 Annual Budget of Agricultural Research Sector  
- 10-Year Plan (Alternative 2)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PR10. TOTAL BUDGET (1000RO)	ANNUAL BUDGET										1991 -1995	1996 -2000	1991 -1995	1996 -2000
			1991	1992	1993	1994	1995	1996	1997	1998	1999	2000				
NAR-1	SUPPORT FOR AGRICULTURAL RESEARCH STATIONS	5,300	1,035	640	395	325	315	828	493	423	423	423	423	423	2,710	2,590
NAR-1-1	AGRICULTURAL RESEARCH FACILITIES AT RUMAIS	1,100	200	100	100	100	100	100	100	100	100	100	100	100	600	500
NAR-1-2	AGRICULTURAL RESEARCH FACILITIES AT JEMMAH	850	350	70	70	60	50	50	50	50	50	50	50	50	300	250
NAR-1-3	AGRICULTURAL RESEARCH FACILITIES AT SALALAH	1,000	350	130	65	65	65	65	65	65	65	65	65	65	375	325
NAR-1-4	AGRICULTURAL RESEARCH FACILITIES AT SOHAR	900	60	300	120	60	60	60	60	60	60	60	60	60	600	300
NAR-1-5	AGRICULTURAL RESEARCH FACILITIES AT SHARQIYA	850	75	40	40	40	40	303	78	78	78	78	78	235	615	
NAR-1-6	AGRICULTURAL RESEARCH FACILITIES AT DHAHIRA	600					250	140	70	70	70	70	70	0	600	
NAR-2	ESTABLISHMENT OF NEW RESEARCH UNITS AND LABORATORIES	5,600	375	690	410	580	520	485	570	640	415	415	415	3,075	2,525	
NAR-2-1	AGRICULTURAL MACHINERY RESEARCH UNIT AT RUMAIS	300	215	65	65	65	65	65	65	65	65	65	65	475	325	
NAR-2-2	TOXICOLOGY LABORATORY (RUMAIS)	300	75	100	30	15	15	13	13	13	13	13	13	235	65	
NAR-2-3	SEED AND TUBER PRODUCTION RESEARCH UNIT (RUMAIS)	650	20	20	20	20	20	20	20	20	20	20	20	100	70	
NAR-2-4	CENTRAL SOIL, PLANT AND WATER ANALYSIS LABORATORY (RUMAIS)	300	300	75	75	75	75	40	40	40	40	40	40	600	200	
NAR-2-5	LIBRARY AND DOCUMENTATION CENTER (RUMAIS)	250	160	30	25	25	25	2	2	2	2	2	2	240	10	
NAR-2-6	PLANT WATER REQUIREMENT DETERMINATION UNIT (SALALAH)	100	100											100	0	
NAR-2-7	MEDICAL AND PERFUME PLANT RESEARCH UNIT (SALALAH)	75												75	0	
NAR-2-8	DISEASE AND PEST FORECASTING UNIT (RUMAIS)	100												100	0	
NAR-2-9	SALT TOLERANT PLANTS AND HALOPHYTES RESEARCH UNITS (RUMAIS)	650												650	0	
NAR-2-10	HONEY BEE LABORATORY (RUMAIS)	200	50	25	25	20	20	20	20	20	20	20	20	140	60	
NAR-2-11	HONEY BEE RESEARCH UNIT (SALALAH)	100	20	15	10	10	10	10	10	10	10	10	10	65	35	
NAR-2-12	HONEY BEE RESEARCH UNIT (JEMMAH)	75	15	15	10	5	5	5	5	5	5	5	5	50	25	
NAR-2-13	DATE PALM RESEARCH UNIT (RUMAIS)	1,500	200	115	95	195	195	60	260	60	60	60	60	800	700	
NAR-3	DEVELOPMENT AND ESTABLISHMENT OF EXPERIMENTAL FARMS AND NURSERIES	2,000	120	270	295	195	160	288	273	143	138	118	118	1,040	960	
NAR-3-1	DEVELOPMENT OF ARABIC COFFEE EXPERIMENTAL FARM IN SALALAH	200												200	0	
NAR-3-2	DEVELOPMENT OF NURSERIES AT RUMAIS AND BARKA	300	120	40	30	20	20	20	20	20	20	20	20	220	80	
NAR-3-3	DEVELOPMENT OF NURSERIES AT SOHAR	150	40	20	20	20	20	6	16	16	16	16	16	100	50	
NAR-3-4	DEVELOPMENT OF NURSERIES IN INTERIOR	400	150	80	40	30	20	20	20	20	20	20	20	300	100	
NAR-3-5	DEVELOPMENT OF NURSERIES IN SOUTHERN REGION	150	40	20	20	20	20	16	16	16	16	16	16	100	50	
NAR-3-6	DEVELOPMENT OF EXPERIMENTAL FARM AT WADI QURIYAT	150												150	0	
NAR-3-7	DEVELOPMENT OF EXPERIMENTAL FARM AT MUSANDAM	100												100	0	
NAR-3-8	DEVELOPMENT OF EXPERIMENTAL FARM AT SHARQIYA	300												300	0	
NAR-3-9	DEVELOPMENT OF EXPERIMENTAL FARM AT DHAHIRA	250												250	0	
NAR-4	FORESTRY-IMPROVEMENT PROGRAM	2,000	200	200	200	200	200	200	200	200	200	200	200	1,000	1,000	
NAR-5	ESTABLISHMENT OF LOCUST SURVEY AND CENTRAL UNIT (RUMAIS, ALL REGION)	2,000	200	200	200	200	200	200	200	200	200	200	200	1,000	1,000	
NAR-6	SOIL SURVEYS	1,300												100	500	
TOTAL	DEVELOPMENT BUDGET TOTAL	19,200	2,430	2,200	1,700	1,700	1,700	1,595	2,101	1,836	1,706	1,476	1,456	9,625	8,575	



Table 5.3.28 Annual Budget of Livestock Sector  
- 10-Year Plan (Alternative 2)

Number of Project	Name of the Project	Project Period	Annual Budget										Total	91-95 Plan	96-2000 Plan		
			1991	1992	1993	1994	1995	1996	1997	1998	1999	2000					
NLL-1	Rangeland Revegetation Project in Southern Region		576	576	400	400	400	240	240	240	240	240	240	240	3,552	2,352	1,200
NLL-1-1	① Establishment of Rangeland Management	2	176	176											352	352	0
NLL-1-2	② Grazing Control	10	400	400	400	400	400	400	400	400	400	400	400	400	3,200	2,000	1,200
NLL-2	Animal Health & Disease Control Project		3,037	2,971	3,237	3,650	3,530	2,911	2,955	2,999	3,044	3,089	31,423	16,425	14,998		
NLE-1	① Development of New Quarantines	5	395	395	395	395	395								1,975	1,975	
NLL-2-1	② Animal Clinics Improvements	5	238	238	238	238	238								1,198	1,198	
NLL-2-2	③ Laboratory Development																
NLL-2-3	④ CAPP Vaccine Development	3	306	20	20	293	30	30	30	30	30	30	30	30	819	669	150
NLL-2-4	⑤ National Vaccination	10	1,369	1,595	1,831	1,971	2,116	2,158	2,202	2,246	2,291	2,336	20,115	8,832	11,233		
NLL-2-5	⑥ Supplies of Veterinary Equipment	10	600	600	600	600	600	600	600	600	600	600	6,000	3,000	3,000		
NLL-2-6	⑦ Brucellosis Control in South	10	123	123	123	123	123	123	123	123	123	123	1,236	621	615		
NLE-1	Livestock Extension Development		196	30	30	156	30	30	30	30	30	30	30	30	632	432	150
NLE-1-1	① Extension Method Improvement	10	30	30	30	30	30	30	30	30	30	30	300	150	150		
	- Demonstration of Using Equipment																
	- Usual Extension																
	- Establishment of Demonstration Unit																
NLE-1-2	② Training Center Development	-	166			166									332	332	
NLR-1	Livestock Research Development		837	792	792	792	837	400	400	400	400	400	400	400	6,050	4,050	2,000
NLR-1-1	① Development of Livestock Research Centers	10	400	400	400	400	400	400	400	400	400	400	4,000	2,000	2,000		
NLR-1-2	② Research Centers Management Consultancy	5	437	392	392	392	437						2,050	2,050			
NLM-1	Livestock Marketing Improvement Project		575	1,661	872	1,734	1,529	1,067	136	30					7,604	6,371	1,233
NLM-1-1	① Company for Livestock Products	7	50	866	200	200	200	180	100						1,716	1,516	200
NLM-1-2	② Cattle Fattening	5				50	130	739	80	30					979	130	799
NLM-1-3	③ Cut Meat Processing	3				171	316	50							537	487	50
NLM-1-4	④ Milk Collecting and Processing	8	25	211	88	729	103	31							1,192	1,161	31
NLM-1-5	⑤ Hides and Skins Development	3					192	64	6						262	192	70
NLM-1-6	⑥ Cattle Destocking Subsidy	5	500	500	500	500	500							2,500	2,500	0	
NLM-1-7	⑦ Marketing Promotion	5	84	84	84	84	83							418	395	83	
NLL-3	Livestock Input Company Project	2	376	983											1,359	1,359	
NLL-4	Small Farm Development Support Project		3,265	3,028	3,046	3,078	3,268	1,274	1,274	1,274	1,274	1,274	1,274	1,274	21,855	15,255	6,370
NLL-4-1	① Smallholder Poultry Production	5	1,761	1,754	1,772	1,774	1,794								8,855	8,855	
NLL-4-2	② Intensive Livestock Production	10	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	1,274	12,740	6,370	6,370
NLL-4-3	③ R.I. Services for Dairy Cow	-	30			30									60	60	
NLL-5	Livestock Specialized Services		778	111	111	111	111	635	111	111	111	111	111	111	2,301	1,232	1,079
NAA-1-1	① Livestock Census	2	524				524								1,048	524	524
NLL-5-1	② National Disease Survey	10	11	11	11	11	11	11	11	11	11	11	11	11	110	55	55
NLM-2	Marketing Survey	1	143												143	143	0
NLL-5-2	④ Consultancy Services(Study)	10	100	100	100	100	100	100	100	100	100	100	100	100	1,000	500	500
	Total		9,064	9,545	9,471	9,961	9,505	6,557	5,146	5,084	5,099	5,144	74,576	47,546	27,030		
	Percentage														63.9	36.2	





Table 5.3.30 Annual Budget of Agricultural Produce Processing Sector  
- 10-Year Plan (Alternative 2)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RO)	ANNUAL BUDGET										1991 -1995	1996 -2000			
				1981	1982	1983	1984	1985	1986	1987	1988	1989	1990					
NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	A	5,100	100	2,500	2,500											5,100	
NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	A	1,410	148	430	406	150			18	120	18	120				1,134	276
NP-3	Establishment of Pickling and Vinegar-Processing Plant	A	1,782	132	1,482						13	155					1,614	168
NP-4	Establishment of Coconut-Processing Plant	A	2,628	1,380	152	412	472	200									2,628	
	Coconut Farm		2,100	1,380	130	160	220	200									2,100	
	Coconut-Processing Plant		528	22	252	252											528	
TOTAL	DEVELOPMENT BUDGET TOTAL		10,918	1,770	4,584	3,318	622	200		31	275	18	120				10,474	444

Table 5.3.31 Annual Budget of Inter-Sectoral Project  
- 10-Year Plan (Alternative 2)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RO)	ANNUAL BUDGET										1991 -1995	1996 -2000			
				1981	1982	1983	1984	1985	1986	1987	1988	1989	1990					
NI-1	Integrated Agricultural Development Project in Nejd 1) Pilot Farm (50ha) 2) Main Development Project (450ha)	A	16,553	1,655	1,655	1,655	3,311	4,966	3,311								13,242	3,311
			1,655	1,655													1,655	
			14,898	1,655	1,655	1,655	3,311	4,966	3,311								11,587	3,311
NI-2	Improvement and Maintenance of MSF Facilities 1) Ministry Building 2) Office Building for Directorate General of Agriculture in 6 Regions 3) Separate Consolidated Allocation for All Consultancies	A	20,991	5,896	5,896	3,600	800	800	800	800	800	800	800	800	800	800	16,591	4,400
			5,191	2,596													5,191	
			7,800	2,500	2,800												7,800	
			8,000	800	800	800	800	800	800	800	800	800	800	800	800	800	4,000	4,000
OI-1	Citizen's Compensation against Natural Crisis	A	3,000	300	300	300	300	300	300	300	300	300	300	300	300	300	1,500	1,500
OI-2	Master Plan for Development of Date Palm Cultivation	A	600														600	
TOTAL	DEVELOPMENT BUDGET TOTAL		41,144	8,450	7,851	5,555	4,411	6,066	4,411	1,100	1,100	1,100	1,100	1,100	1,100	1,100	32,332	8,811

Table 5.3.32 Regional Budget Total - 10-Year Plan (Alternative 2)

SECTOR	PROJECT NUMBER	NAME OF PROJECT/PROGRAM	TOTAL BUDGET (1000R0)	REGION					MUSCOT	BATINAH	SHARQIYA	DAKHLIYA	DHAKIRA	JANUBIYA	MUSANDAM	
				MUSCOT	BATINAH	SHARQIYA	DAKHLIYA	DHAKIRA								JANUBIYA
Irrigation and Dam	NA-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	259,922	8,277	112,891	32,143	56,115	32,918	2,550	2,550	3,023	3,023	3,023	3,023	3,023	
	NA-2	Subsidy for New Irrigation System Project	42,030	750	20,825	4,875	5,250	3,375	2,250	2,250	375	375	375	375	375	
	NA-3	Legal Framework for Agricultural Water Use	250	19	128	38	35	25	25	25	8	8	8	8	8	
	NA-4	Recharge Dams	81,645	4,755	39,389	8,488	13,387	11,873	1,445	1,445	2,408	2,408	2,408	2,408	2,408	
	NA-5	Sub-surface (Underground) Dams	5,800	2,120	13,313	2,950	22,230	11,118	35	35	35	35	35	35	35	
	NA-6	Wells	33,628	2,120	13,313	2,950	22,230	11,118	35	35	35	35	35	35	35	
	NA-7	Wells	18,000	128	5,580	4,588	5,248	4,203	180	180	128	128	128	128	128	
	NA-8	Springs	4,087													
	NA-9	Erosion Control and Protection of Agricultural Land against Floods	6,510													
	NA-10	Survey and Monitoring	5,820	322	2,649	667	1,383	700	200	119	119	119	119	119	119	
Agricultural Research	NAR-1	Support for Agricultural Research Stations	18,200	160	9,240	2,050	2,185	1,400	2,895	180	180	180	180	180		
	NAR-2	Establishment of New Research Units and Laboratories	5,300													
	NAR-3	Development and Establishment of Experimental Farms and Nurseries	5,000													
	NAR-4	Forestry-Improvement Program	2,000	80	500	300	200	200	200	200	200	200	200	200		
	NAR-5	Establishment of Locust Survey and Control Unit	1,300	80	1,040	300	200	200	200	200	200	200	200	200		
	NAR-6	Soil Surveys	1,300	80	1,040	300	200	200	200	200	200	200	200	200		
Agricultural Extension	NAE-1	Improvement and Development of Extension Centers and Facilities	23,058	1,353	8,335	4,626	4,323	3,323	1,127	1,127	852	852	852	852		
	NAE-2	Establishment of Development Support Communication Center (DSCC)	1,190	112	840	561	737	643	293	293	293	293	293	293		
	NAE-3	Training of Researchers, Extension Staff and Statistics Staff	2,520	77	1,145	285	326	285	324	89	89	89	89	89		
	NAE-4	Intensive Extension Guidance Program	15,820	920	4,950	3,880	3,240	2,400	510	488	488	488	488	488		
Agricultural Production	NPA-1	Collection and Organization of Agricultural Statistics	21,950	1,858	10,551	2,830	2,852	1,820	2,820	1,820	463	463	463	463		
	NPA-2	Agricultural Exhibitions and Festivals	2,080	62	1,930	395	288	200	124	41	41	41	41	41		
	NPA-3	National Project for Plant Protection and Aerial Spraying	1,400	971	71	71	71	71	71	71	71	71	71	71		
	NPA-4	Agricultural Technology Transfer to Farmers Project	7,500	225	4,050	1,050	825	975	525	150	150	150	150	150		
	NPA-5	Development and Improvement of Plant Quarantine	10,000	300	5,400	1,400	1,100	900	200	200	200	200	200	200		
	NPA-6	Development and Improvement of Plant Quarantine	800	300	5,400	1,400	1,100	900	200	200	200	200	200	200		
	NPA-7	Rangeland Revegetation Project in Southern Region	74,578	2,328	15,384	7,071	8,404	7,542	31,575	1,612	1,612	1,612	1,612	1,612		
	NPA-8	Animal Health and Disease Control Project	3,552													
	NPA-9	Livestock Extension Development Project	31,423	793	7,450	3,227	2,649	4,575	1,592	380	380	380	380	380		
	NPA-10	Livestock Research Development Project	6,950	632	241	36	271	30	271	30	271	30	271	30		
Livestock	NL-1	Livestock Marketing Improvement Project	7,984	91	196	180	100	109	6,988	13	13	13	13	13		
	NL-2	Livestock Input Company Project	1,959	283	5,027	3,424	3,608	2,547	6,136	533	533	533	533	533		
	NL-3	Small Farm Development Support Project	21,655	282	5,075	2,76	236	276	276	885	885	885	885	885		
	NL-4	Livestock Specialized Services Program	2,301	69	575	2,843	2,745	3,087	4,684	91	91	91	91	91		
	NL-5	Livestock Specialized Services Program	30,867	10,372	6,235	2,843	2,745	3,087	4,684	91	91	91	91	91		
Distribution	ND-1	Establishment of Wholesale Market	18,326	7,243	2,458	1,882	1,882	2,458	2,458	2,458	2,458	2,458	2,458	2,458		
	ND-2	Supply and Demand Forecast of Agricultural Produce	444	165	307	185	165	165	165	165	165	165	165	165		
	ND-3	Establishment of Shipping Organization for Farmers	1,220	165	3,371	391	839	452	1,748	81	81	81	81	81		
	ND-4	Fortification of PHMP	19,919	1,408	4,009	765	1,293	510	2,779	182	182	182	182	182		
	ND-5	Fortification of PHMP	5,160	204	2,662	765	712	510	719	762	762	762	762	762		
Agricultural Produce Processing	NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	1,418	449	466		495									
	NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	1,782	887	891		84									
	NP-3	Establishment of Pickling and Vinegar-Processing Plant	2,928													
	NP-4	Establishment of Coconut-Processing Plant	41,144	5,955	7,282	2,930	2,874	2,410	18,451	1,492	1,492	1,492	1,492			
Inter-Sectoral	NI-1	Integrated Agricultural Development Project in Nojd	16,553	5,511	5,410	2,458	2,370	2,058	1,790	10,553	10,553	10,553	10,553			
	NI-2	Improvement and Maintenance of RWF Facilities	20,391													
	NI-3	Artificial Rainfall Project	3,000	120	1,500	490	420	380	380	380	380	380	380			
	NI-4	Citizen's Compensation against Natural Crisis	500	24	312	98	84	80	18	18	18	18	18			
	NI-5	Master Plan for Development of Date Palm Cultivation	479,737	32,068	173,238	55,318	80,284	54,248	70,761	7,818	7,818	7,818	7,818			
Total																

Table 5.3.33 Regional Budget of Irrigation and Dam Sector  
- 10-Year Plan (Alternative 2)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO	TOTAL BUDGET (1000R)	REGION													
				MUSCAT	BATAH	SHARQ	ADAKALI	YADHARI	RAJABUN	JANUBI	MUSANDAM						
NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	A	42,000	27,360	3,960	3,900	2,550	4,620									
	Study Phase(S,F,S)		2,420	360	600	380	120										
	Pilot Project		39,578	27,000	2,700	3,380	2,170	4,500									
NW-2	Subsidy for New Irrigation System Project for 30,000ha	A	37,500	750	20,625	4,875	5,250	3,375	2,250	375							
NW-3	Legal Framework for Agricultural Water Use	A	250	10	130	30	25	8									
NW-4	Recharge Dams	A	81,645	4,755	39,389	8,408	13,367	11,873	1,445	2,408							
NW-4-1	Groundwater-Recharge Scheme																
	Study Phase		6,120	410	3,190	620	1,050	540	100	210							
	Construction Phase		61,200	4,000	32,800	6,800	10,200	5,200	1,000	2,000							
NW-4-2	Maintenance and Improvement of Existing and Newly Constructed Dams		7,325	295	3,249	738	2,067	1,033	295	149							
NW-4-3	Recharged Water Effective Use Pilot Project(Study)		500	50	150	50	50	100	50	50							
NW-4-4	Identification of New Groundwater-Recharge Schemes		6,000			1,000		5,000									
NW-5	Sub-Surface (Underground) Dams	A	5,000	2,765	35	2,130	35	35									
	Reconnaissance Study		75	35	10	10	10	10									
	Preliminary Study		150	50	25	25	25	25									
	Feasibility Study		300	200	100	100	100	100									
	Pilot Project(Construction)		4,325	2,425	1,900	1,900											
	Observation and Monitoring		150	55	55	55	55	55									
NW-6	Aflaj	A	59,020	2,420	13,310	9,950	22,230	11,110									
NW-6-1	Repair and Maintenance of Aflaj		48,000	2,420	10,500	7,200	19,240	9,520									
NW-6-2	Distribution System Improvement Pilot Project in Oasis(Study)		1,500	300	300	300	600	300									
NW-6-3	Improvement and Maintenance of Major Aflaj		1,520	20	450	450	300	210									
	Study		8,000	2,000	2,000	2,000	3,000	1,000									
	Construction																
NW-7	Wells	A	18,000	120	5,580	4,500	3,240	4,200	180	120							
NW-7-1	Subsidy for Repair of Existing Open Wells -		6,000	120	3,180	900	840	600	180	120							
NW-7-2	Assistant Wells for Aflaj		12,000		2,400	3,600	2,400	3,600									
NW-8	Springs	A	4,087														
NW-8-1	Improvement of Springs		3,500														
NW-8-2	Annual Maintenance of Open Channel for Spring		587														
NW-9	Erosion Control and Protection of Agricultural Land against Floods	A	6,510			850	550	4,700	50	525							
	Study Phase		410		185	50	100	50	25								
	Construction Phase		6,100		500	500	4,600	500									
NW-10	Survey and Monitoring	A	5,820	22	2,540	667	1,263	700	200	119							
NW-10-1	Long-term Plan for Aerial Photography and Ortho-photo Mapping		2,200	85	1,147	325	307	222	63	51							
NW-10-2	Establishment and Operation of hydrological Monitoring Network for Recharge Dams		3,620	137	1,502	342	956	478	137	68							
TOTAL	DEVELOPMENT BUDGET TOTAL		259,922	8,277	113,091	32,143	56,115	83,919	13,350	3,028							

Table 5.3.34 Regional Budget of Agricultural Research Sector  
- 10-Year Plan (Alternative 2)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RO)	REGION						
				MUSCAT	BATINAH	SHARQIYAH	AKHLIYAH	DHAHIRA	JANUBIYAH	MUSANDAM
NAR-1	SUPPORT FOR AGRICULTURAL RESEARCH STATIONS		5,300		2,000	850	850	600	1,000	
NAR-1-1	AGRICULTURAL RESEARCH FACILITIES AT RUMAIS	A	1,100		1,100					
NAR-1-2	AGRICULTURAL RESEARCH FACILITIES AT JEMMAH	A	850			850				
NAR-1-3	AGRICULTURAL RESEARCH FACILITIES AT SALALAH	A	1,000						1,000	
NAR-1-4	AGRICULTURAL RESEARCH FACILITIES AT SOHAR	A	900		900					
NAR-1-5	AGRICULTURAL RESEARCH FACILITIES AT SHARQIYA	A	850			850				
NAR-1-6	AGRICULTURAL RESEARCH FACILITIES AT DHAHIRA	A	600					600		
NAR-2	ESTABLISHMENT OF NEW RESEARCH UNITS AND LABORATORIES		5,600		5,250	75			275	
NAR-2-1	AGRICULTURAL MACHINERY RESEARCH UNIT AT RUMAIS	A	900		800					
NAR-2-2	TOXICOLOGY LABORATORY (RUMAIS)	A	300		300					
NAR-2-3	SEED AND TUBER PRODUCTION RESEARCH UNIT (RUMAIS)	A	650		650					
NAR-2-4	CENTRAL SOIL, PLANT AND WATER ANALYSIS LABORATORY (RUMAIS)	A	800		800					
NAR-2-5	LIBRARY AND DOCUMENTATION CENTER (RUMAIS)	A	250		250					
NAR-2-6	PLANT WATER REQUIREMENT DETERMINATION UNIT (SALALAH)	A	100						100	
NAR-2-7	MEDICAL AND PERFUME PLANT RESEARCH UNIT (SALALAH)	A	75						75	
NAR-2-8	DISEASE AND PEST FORECASTING UNIT (RUMAIS)	A	100		100					
NAR-2-9	SALT TOLERANT PLANTS AND HALOPHYTES RESEARCH UNITS (RUMAIS)	A	650		650					
NAR-2-10	HONEY BEE LABORATORY (RUMAIS)	A	200		200					
NAR-2-11	HONEY BEE RESEARCH UNIT (SALALAH)	A	120						120	
NAR-2-12	HONEY BEE RESEARCH UNIT (JEMMAH)	A	75			75				
NAR-2-13	DATE PALM RESEARCH UNIT (RUMAIS)	A	1,500		1,500					
NAR-3	DEVELOPMENT AND ESTABLISHMENT OF EXPERIMENTAL FARMS AND NURSERIES		2,000		450	550	300	250	350	100
NAR-3-1	DEVELOPMENT OF ARABIC COFFEE EXPERIMENTAL FARM IN SALALAH	A	200						200	
NAR-3-2	DEVELOPMENT OF NURSERIES AT RUMAIS AND BARKA	A	300		300					
NAR-3-3	DEVELOPMENT OF NURSERIES AT SOHAR	A	150		150					
NAR-3-4	DEVELOPMENT OF NURSERIES IN INTERIOR	A	400			400				
NAR-3-5	DEVELOPMENT OF NURSERIES IN SOUTHERN REGION	A	150						150	
NAR-3-6	DEVELOPMENT OF EXPERIMENTAL FARM AT HADI QURIYAT	A	150			150				
NAR-3-7	DEVELOPMENT OF EXPERIMENTAL FARM AT MUSANDAM	A	100							100
NAR-3-8	DEVELOPMENT OF EXPERIMENTAL FARM AT SHARQIYA	A	300				300			
NAR-3-9	DEVELOPMENT OF EXPERIMENTAL FARM AT DHAHIRA	A	250					250		
NAR-4	FORESTRY-IMPROVEMENT PROGRAM	A	2,000	80	500	280	300	200	600	40
NAR-5	ESTABLISHMENT OF LOCUST SURVEY AND CENTRAL UNIT (RUMAIS, ALL REGION)	A	2,000	30	1,040	280	300	200	60	40
NAR-6	SOIL SURVEYS	A	1,300				300	150	700	
TOTAL	DEVELOPMENT BUDGET TOTAL		18,200	160	9,240	2,050	2,185	1,400	2,985	190

Table 5.3.35 Regional Budget of Agricultural Extension Sector  
- 10-Year Plan (Alternative 2)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RO)	REGION						
				MUSCAT	BATINAH	SHARQIYAH	DAKHLIYAH	HAIHA	JANUBIYAH	SANDRAH
NRE-1	IMPROVEMENT AND DEVELOPMENT OF EXTENSION CENTERS AND FACILITIES		3,520	172	840	561	727	643	283	284
NRE-1-1	ESTABLISHMENT OF EXTENSION CENTERS IN REMOTE AREA	A	400			50	100	150		100
NRE-1-2	IMPROVEMENT OF EXTENSION CENTER FACILITIES	A	1,620	72	540	211	287	243	183	84
NRE-1-3	DEVELOPMENT OF AGRICULTURAL TECHNOLOGY INFORMATION UNITS (ATIU)	A	1,500	100	300	300	350	250	100	100
NRE-2	ESTABLISHMENT OF DEVELOPMENT SUPPORT COMMUNICATION CENTER (DSCC)	A	1,190	1,190						
NRE-3	TRAINING OF RESEARCHERS, EXTENSION STAFF AND STATISTICS STAFF	A	2,520	77	1,145	285	326	285	334	88
NRE-4	INTENSIVE EXTENSION GUIDANCE PROGRAM		15,820	520	4,950	3,300	3,250	2,400	510	480
NRE-4-1	SUPPORTING KEY FARMER EXTENSION PROGRAM	A	3,000	180	1,400	450	420	300	270	60
NRE-4-2	DATE PALM REHABILITATION & IMPROVEMENT PROGRAM	A	11,820	400	3,000	3,200	3,700	2,000	130	400
NRE-4-3	PROVISION OF INPUTS FOR EXPERIMENTAL PURPOSES	A	1,000	20	450	150	140	100	130	20
TOTAL	DEVELOPMENT BUDGET TOTAL		23,050	1,959	6,835	4,826	4,323	3,328	1,127	852

Table 5.3.36 Regional Budget of Agricultural Production Sector  
- 10-Year Plan (Alternative 2)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RO)	REGION						
				MUSCAT	BATINAH	SHARQIYAH	DAKHLIYAH	HAIHA	JANUBIYAH	SANDRAH
NRA-1	COLLECTION AND ORGANIZATION OF AGRICULTURAL STATISTICS		2,060	62	1,930	309	288	206	124	41
NRA-1-1	AGRICULTURAL CENSUS	A	1,400	42	1,200	210	196	140	84	28
NRA-1-2	ANNUAL UPDATE OF IMPORTANT AGRICULTURAL STATISTICS	A	660	20	330	99	92	66	40	13
NRA-2	AGRICULTURAL EXHIBITION AND FESTIVAL		1,400	971	71	71	71	71	71	71
NRA-2-1	INTERNATIONAL AGRICULTURE AND FOOD EXHIBITION	A	300	300						
NRA-2-2	DOMESTIC AGRICULTURAL FESTIVAL	A	500	71	71	71	71	71	71	71
NRA-3	NATIONAL PROJECT FOR PLANT PROTECTION AND AERIAL SPRAY	A	7,500	225	4,300	1,350	823	675	525	150
NRA-4	AGRICULTURAL TECHNOLOGY TRANSFER PROJECT TO FARMERS	A	10,000	300	5,400	1,400	1,100	900	700	200
NRA TOTAL			20,960	1,558	10,551	2,830	2,285	1,852	1,420	463
NRA-1	DEVELOPMENT & IMPROVEMENT OF PLANT QUARANTINE	A	300	300				300	400	
TOTAL	DEVELOPMENT BUDGET TOTAL		21,860	1,858	10,551	2,830	2,285	2,052	1,820	463

Table 5.3.37 Regional Budget of Livestock Sector  
- 10-Year Plan (Alternative 2)

Number of Project	Name of the Project	Project Period	Region			Total
			Muscat	Sharqiyah	Dhahira	
NLL-1	Rangeland Revegetation Project in Southern Region					3,552
NLL-1-1	① Establishment of Rangeland Management	2				352
NLL-1-2	② Grazing Control	10				3,200
NLL-2	Animal Health & Disease Control Project		793	7,499	2,649	11,941
NLL-2-1	① Development of New Quarantines	5	10	285	1,385	170
NLL-2-1	② Animal Clinics Improvements	5	139	93	37	813
NLL-2-2	③ Laboratory Development	-	438			333
NLL-2-3	④ CAPP Vaccine Development	3	90			90
NLL-2-4	⑤ National Vaccination	10	503	5,029	2,414	7,946
NLL-2-5	⑥ Supplies of Veterinary Equipment	10	180	1,500	720	2,400
NLL-2-6	⑦ Brucellosis Control in South	12				1,236
NLE-1	Livestock Extension Development		8	241	36	271
NLE-1-1	① Extension Method Improvement	12	9	75	36	105
	② Demonstration of Using Equipment					
	③ Visual Extension					
	④ Establishment of Demonstration Unit					
NLE-1-2	⑤ Training Center Development	-	166			166
NLR-1	Livestock Research Development		2,446		1,473	2,131
NLR-1-1	① Development of Livestock Research Centers	10	1,500		1,000	1,500
NLR-1-2	② Research Centers Management Consultancy	5	946		473	631
NLM-1	Livestock Marketing Improvement Project		81	136	183	6,383
NLM-1-1	① Company for Livestock Products	7				1,716
NLM-1-2	② Cattle Fattening	5				979
NLM-1-3	③ Cut Meat Processing	3				537
NLM-1-4	④ Milk Collecting and Processing	6	65	32	32	1,031
NLM-1-5	⑤ Hides and Skins Development	3	26	26	26	79
NLM-1-6	⑥ Cattle Destocking Subsidy	5				2,500
NLM-1-7	⑦ Marketing Promotion	5	105	50	42	145
NLL-3	Livestock Input Company Project	2	363		376	1,359
NLL-4	Small Farm Development Support Project		362	5,027	3,424	8,813
NLL-4-1	① Smallholder Poultry Production	5		1,842	2,302	1,647
NLL-4-2	② Intensive Livestock Production	10	362	3,185	1,529	4,459
NLL-4-3	③ A.I. Services for Dairy Cow	-			30	60
NLL-5	Livestock Specialized Services		89	875	276	895
NLL-5-1	① Livestock Census	2	31	262	105	367
NLL-5-1	② National Disease Survey	10	3	28	13	39
NLL-5-2	③ Marketing Survey	1	4	36	17	50
NLL-5-2	④ Consultancy Services (Study)	10	30	250	120	350
	Total		2,328	15,984	7,071	31,576
	Percentage		8.1	21.4	9.5	11.3
						42.3
						2.2
						120





Table 5.3.39 Regional Budget of Agricultural Produce Processing Sector  
- 10-Year Plan (Alternative 2)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RO)	REGION						
				MUSCAT	BATINASHARQIYAD	DAKHLIYAD	HAHIRAJANUBIYAMUSANDAM	JANUBIYAMUSANDAM		
NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	A	5,100	204	2,652	765	714	510	153	102
NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	A	1,410	440	466		495			
NP-3	Establishment of Pickling and Vinegar-Processing Plant	A	1,702	607	891		84			
NP-4	Establishment of Coconut-Processing Plant	A	2,626						2,626	
	Coconut Farm		2,100						2,100	
	Coconut-Processing Plant		526						526	
TOTAL	DEVELOPMENT BUDGET TOTAL		10,910	1,460	4,009	765	1,293	510	2,779	102

Table 5.3.40 Regional Budget of Inter-Sectoral Projects  
- 10-Year Plan (Alternative 2)

PROJECT NUMBER	NAME OF PROJECT/PROGRAM	PRIO.	TOTAL BUDGET (1000RO)	REGION						
				MUSCAT	BATINASHARQIYAD	DAKHLIYAD	HAHIRAJANUBIYAMUSANDAM	JANUBIYAMUSANDAM		
NI-1	Integrated Agricultural Development Project in Nejd 1) Pilot Farm (50ha) 2) Main Development Project (450ha)	A	16,553						16,553	
			1,655						1,655	
			14,898						14,898	
NI-2	Improvement and Maintenance of HAF Facilities 1) Ministry Building 2) Office Building for Directorate General of Agriculture in 6 Regions 3) Separate Consolidated Allocation for All Consultancies	A	20,991	5,511	5,410	2,450	2,370	2,050	1,790	1,410
			5,191	5,191						
			7,800	1,250	1,250	1,250	1,250	1,250	1,550	1,250
			8,000	320	4,160	1,200	1,120	800	240	160
OI-1	Citizen's Compensation against Natural Crisis	A	3,000	120	1,550	450	420	300	90	60
OI-2	Master Plan for Development of Date Palm Cultivation	A	600	24	312	90	84	60	18	12
TOTAL	DEVELOPMENT BUDGET TOTAL		41,144	5,655	7,282	2,990	2,874	2,410	18,451	1,482

Table 5.4.1 Comparative Description of 10-Year Plan  
- Full, Alternative 1 and Alternative 2

SECTOR	PROJECT NUMBER	NAME OF PROJECT/PROGRAM	FULL (1000RO)	ALTERNATIVE	
				(1) (1000RO)	(2) (1000RO)
Irrigation and Dam		Subtotal	357,397	186,107	259,922
	NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	60,990	26,370	42,090
	NW-2	Subsidy for New Irrigation System Project	37,500	31,250	37,500
	NW-3	Legal Framework for Agricultural Water Use	250	250	250
	NW-4	Recharge Dams	86,633	79,240	81,645
	NW-5	Sub-surface (Underground) Dams	5,000	5,000	5,000
	NW-6	Aflaj	113,420	22,520	59,020
	NW-7	Wells	30,240	5,100	18,000
	NW-8	Springs	5,914	4,087	4,087
	NW-9	Erosion Control and Protection of Agricultural Land against Floods	11,510	6,510	6,510
	NW-10	Survey and Monitoring	5,940	5,780	5,820
Agricultural Research		Subtotal	18,200	18,200	18,200
	NAR-1	Support for Agricultural Research Stations	5,300	5,300	5,300
	NAR-2	Establishment of New Research Units and Laboratories	5,600	5,600	5,600
	NAR-3	Development and Establishment of Experimental Farms and Nurseries	2,000	2,000	2,000
	NAR-4	Forestry-Improvement Program	2,000	2,000	2,000
	NAR-5	Establishment of Locust Survey and Central Unit	2,000	2,000	2,000
	NAR-6	Soil Surveys	1,300	1,300	1,300
Agricultural Extension		Subtotal	24,000	23,050	23,050
	NAE-1	Improvement and Development of Extension Centers and Facilities	4,470	3,520	3,520
	NAE-2	Establishment of Development Support Communication Center(DSCC)	1,190	1,190	1,190
	NAE-3	Training of Researchers, Extension Staff and Statistics Staff	2,520	2,520	2,520
	NAE-4	Intensive Extension Guidance Program	15,820	15,820	15,820
Agricultural Production		Subtotal	25,060	21,860	21,860
	NAA-1	Collection and Organization of Agricultural Statistics	2,560	2,060	2,060
	NAA-2	Agricultural Exhibitions and Festivals	1,400	1,400	1,400
	NAA-3	National Project for Plant Protection and Aerial Spraying	10,000	7,500	7,500
	NAA-4	Agricultural Technology Transfer to Farmers Project	10,000	10,000	10,000
	NAQ-1	Development and Improvement of Plant Quarantine	1,100	900	900
Livestock		Subtotal	79,320	72,520	74,576
	NLL-1	Rangeland Revegetation Project in Southern Region	3,552	3,552	3,552
	NLL-2	Animal Health and Disease Control Project	31,423	29,367	31,423
	NLE-1	Livestock Extension Development Project	632	632	632
	NLR-1	Livestock Research Development Project	6,550	6,050	6,050
	NLM-1	Livestock Marketing Improvement Project	7,604	7,604	7,604
	NLL-3	Livestock Input Company Project	1,359	1,359	1,359
	NLL-4	Small Farm Development Support Project	25,899	21,655	21,655
	NLL-5	Livestock Specialized Services Program	2,301	2,301	2,301
	Distribution		Subtotal	30,067	30,067
ND-1		Establishment of Wholesale Market	18,326	18,326	18,326
ND-2		Supply and Demand Forecast of Agricultural Produce	444	444	444
ND-3		Establishment of Shipping Organization for Farmers	1,220	1,220	1,220
ND-4		Fortification of PAMAP	10,077	10,077	10,077
Agricultural Produce Processing		Subtotal	10,918	10,918	10,918
	NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	5,100	5,100	5,100
	NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	1,410	1,410	1,410
	NP-3	Establishment of Pickling and Vinegar-Processing Plant	1,782	1,782	1,782
	NP-4	Establishment of Coconut-Processing Plant	2,626	2,626	2,626
Inter-Sectoral		Subtotal	43,644	41,144	41,144
	NI-1	Integrated Agricultural Development Project in Nejd	16,553	16,553	16,553
	NI-2	Improvement and Maintenance of MAF Facilities	20,991	20,991	20,991
	NI-3	Artificial Rainfall Project	2,500	0	0
	OI-1	Citizen's Compensation against Natural Crisis	3,000	3,000	3,000
	OI-2	Master Plan for Development of Date Palm Cultivation	600	600	600
Total			588,606	403,866	479,737
		MAF Budget	557,333	372,593	448,464
		PAMAP Budget	31,273	31,273	31,273
		Agricultural Investment	535,524	350,784	426,655



*CHAPTER 6*

*REGIONAL DEVELOPMENT*



## CHAPTER 6 REGIONAL DEVELOPMENT

### 6.1 Regional Development Approach

In the early stages of economic development of a country, emphasis is focused first on the establishment of social infrastructures in the capital area. Production sectors' comparative advantage exists in international terms of trade, as a means of effective application of limited resources.

Thus, the development plan in the initial phase focuses on establishing a base from which development can spread to other parts of the country. After this base is established, usually the capital area as mentioned above, is established economically to a certain level, and then regional development begins to assume importance in national planning.

Regional development in developing countries, principally in Asia, generally occurred according to the following model:

#### Phase 1

In this initial stage, occurring generally in the 1960's for many developing nations, an unbalanced development strategy was pursued by implementing large-scale projects to develop local production of basic materials and to promote the import substitution industry. Areas where this production capability existed were consequently the sites of large projects to develop water resources, mineral resources, and trunk infrastructure for transport. Strategy thus centered on natural resources development.

However, the unbalanced nature of the strategy skewed development in favor of urban and other population centers at the expense of rural areas. The economy assured a dual structure of society with serious disparity in the level of development between the city and the countryside which tended to get worse as time progressed.

## Phase 2

In the 1970's, a growing shift in planning policy was seen in developing countries with focus dispersed away from the economic base in the capital area to the rural area, including an integrated rural development approach which encompassed all regions of the country. Emphasis was placed on increasing the capacity of rural areas to support population, development of distribution infrastructures, introduction of new farming technology, and construction of secondary and tertiary irrigation systems.

## Phase 3

Balanced development in both the public and private sectors was pursued with a view to stabilizing the socio-economy. Infrastructures to improve daily rural life were addressed, and projects promoted were of a nature whereby the active participation of intended beneficiaries in both planning and implementation was encouraged.

In the agricultural sector, projects aimed at environmental protection and conservation. Small-scale irrigation and various on-farm projects, for which operation and maintenance were within the scope of the farmer's capability, were emphasized.

As this trend progressed, the farm village became the center of agricultural policy combining a strategy of farm and village development including an enhanced living environment and rational irrigation water management.

Through the above process, agriculture is developed as the base industry of the regional community. The agricultural sector comes to represent a rational integration of traditional farming, modern agriculture and related small industries, and is recognized as embodying the function of wise management of the regional environment and its resources.

Regional development may thus be considered as rural development, with agriculture at the center of a balanced regional economy also containing industrial and marketing components.

In formulating this type of regional development strategy, attention should be given to the following:

- (1) Self-reliance of the regional community (establishment of a rural society capable of independently and vigorously pursuing agricultural activity).
- (2) Environmental conservation.
- (3) Balance between population and land use.
- (4) Balanced availability of goods, and improved income.
- (5) Establishment of small-scale infrastructures (as opposed to large-scale conventionally emphasized).
- (6) Diversification towards a multi-cultural production system and reassessment of traditional agriculture

In the case of Oman, the Regional Development Committees have been established for the most backward regions to formulate the regional development program and implement and manage, during the initial stages, the development projects for the region. Once a certain level of development is achieved under the projects in the region, the functions of these are transferred by the committee to the concerned government agencies. Under this program, development results have been achieved in Buraimi and Musandam.

In addition to the above, the various government agencies pursue independent development programs on their own as well. Accordingly, there is much room for more government effort.

The current role of MAF in regional development is limited to the implementation of projects related to the agricultural sector. Nevertheless, agricultural development as a part of regional development is of extreme importance as almost half of the Omani work force is employed in the agricultural sector, and more than half of the nation's population resides in rural areas. It is expected that MAF will in the



coming years assume more and more leadership in the area of regional development.

## 6.2 Regional Development Strategy under the 10-Year Agricultural Development Plan

To date, agricultural development has been pursued from a national standpoint, with the sectoral base being established in the capital region under the previous Five-year Development Plans. Consequently, it is appropriate in the future to disperse this base to the key cities in each region. This corresponds to phase 2 of the previously discussed regional development model.

The government recognizes the importance of regional development and formulates the regional development plan in advance of formulating the Fourth Five-year Development Plan.

Under the 10-year Master Plan, the "upstream" agricultural and livestock production sectors are to be developed through the new technology dissemination effect of agricultural research stations and extension centers in rural areas centering on the key regional towns. The services and activities under the foregoing facilities would reach not only farmers in and around the key towns, but in remote areas as well. Distribution facilities and wholesale markets under PAMAP would also be established at the key towns to facilitate the movement of produce to the "downstream" consumer market.

At the same time, agricultural production infrastructures would be strengthened through projects to construct recharge dams, rehabilitate traditional falaj and well systems, and establish modern irrigation facilities, for efficient management of limited water resources.

The above strategy would function to systematically remove the constraints affecting Omani agriculture. Common constraints to all regions are:

- (1) Finite water resources, aggravated by overdrafting of groundwater accompanying expansion of cultivated land.
- (2) Inadequate agricultural production infrastructures.
- (3) Depressed levels of agricultural and animal husbandry technology aggravated by lack of trained personnel to introduce appropriate modern methods.
- (4) Underdeveloped distribution system for agricultural and livestock products.
- (5) Migration of youth away from agriculture.

Specific regional issues are as follows:

- (1) Saline intrusion in Batinah and Salalah due to overdrafting of groundwater.
- (2) Degeneration of rangeland in Janubiya due to overgrazing of livestock.

In order to address the above constraints, the JICA team has formulated the following programs:

- (1) Groundwater recharge through construction of recharge dams.
- (2) Economical water use through introduction of efficient irrigation systems.
- (3) Strengthening of research and extension activities pertaining to new agricultural and livestock technology to upgrade farmers' technical levels.
- (4) Subsidies for inputs, equipment and machinery as an incentive for farmers to adopt new techniques.
- (5) Promotion of farm management combining both cropping and animal husbandry as a measure to increase the farm income of the small farmer in particular.
- (6) Improvement of distribution system efficiency through the establishment of wholesale markets under PAMAP and other distribution facilities and organizations.
- (7) Diversification of the rural economy through promotion of rural industries.
- (8) Stimulation of awareness and interest in agriculture to stem the

migration of youth away from the agricultural sector.

Regional divisions designated by the Development Council are as follows: Muscat, Batinah, Sharqiya, Dakhliya, Dhahira, Janubiya and Musandam.

### 6.3 Regional Allocation of Agricultural Development Budget

Under the Master Plan, the nationwide project development potential over the 10-year period was identified, and its total corresponding budget to achieve the same was calculated. Regional allocation was then determined within this overall framework.

The Development Council has indicated that the allocation of the development budget for the overall national plan should be as follows:

Muscat	25%
Janubiya	10%
Batinah, Sharqiya, Dakhliya, Dhahira, Musandam	65%

The JICA team formulated its regional allocation plan for agricultural investment bearing in mind the above. However, it must be noted that as the budget in question is specifically for agricultural development, the breakdown by region does not completely correspond with the Development Council's percentages which represent budget allocations covering all sectors, not just agriculture.

The JICA team applied criteria set out in section 5.2.2.2 (2) in determining regional allocation.

For projects pertaining to criteria (b) and (c), total project load is known, but specific regional outlay will not be clear until the implementation stage. For strictly national projects and programs, regional outlay is estimated on the basis of arbitrary criteria such as cropped area, number of head of livestock affected in a particular region, etc. Such regional outlays would be subject to readjustment as necessary

at the project implementation stage.

Regional outlay under the total investment target of R.O. 589 million under the 10-year Agricultural Development Plan is indicated in Tables 6.3.1 - 6.3.2. Summarized, it is as follows:

Muscat	6%
Janubiya	14%
Total for other regions	80%

As projects are agriculture-related, the investment proportion for Muscat is as low as would be expected. The reasons for a high investment rate in Janubiya are:

- (1) Of the primary production sectors, animal husbandry is the most backwards and therefore, has the most potential for development. Janubiya would be the focus of efforts to accelerate development of the livestock sector under the 10-year Master Plan. 42 % of the total investment in this sector would be allocated to Janubiya.
- (2) The inter-sectoral Integrated Agricultural Development Project for the Nejd Region has the highest priority for a large-scale agricultural project and is accordingly given investment priority in the Master Plan.
- (3) The soil survey program for Nejd and the forestry improvement program for Jabal are high priority projects.
- (4) The coconut processing plant which has good feasibility and is anticipated to lead to production of export-oriented products in the future will be implemented in the Janubiya Region.

The largest regional outlay is that for the Batinah Region. The reason for this is that it is the major agriculture production area in Oman. The next largest regional outlay is for Dakhliya, and the next being roughly equal are for Dhahira and Sharqiya.

Table 6.3.1 Regional Budget Summary (R.O. 1,000)  
(Full 10- Year Plan)

Sector	Total	Muscat	Batinah	Sharqiya	Dakhliya	Dhahira	Janubiya	Musandam
Irrigation and Dam	357,397	11,534	145,106	45,586	83,274	53,487	15,306	3,104
Agricultural Research	18,200	160	9,240	2,050	2,185	1,400	2,985	180
Agricultural Extension	24,000	1,959	7,285	4,676	4,523	3,428	1,277	852
Agricultural Production	25,060	1,948	12,151	3,255	2,629	2,527	2,025	522
Livestock	79,320	2,455	17,045	7,580	9,388	8,051	33,061	1,740
Distribution	30,067	10,372	6,235	2,843	2,745	3,087	4,694	91
Processing	10,918	1,460	4,009	765	1,293	510	2,779	102
Inter-Sectoral Projects	43,644	5,655	7,282	2,990	2,874	2,410	20,951	1,482
Total	588,606	35,543	208,353	69,746	108,912	74,901	83,078	8,073

Table 6.3.2 Regional Investment Distribution by Sector (%)

Sector	Total	Muscat	Batinah	Sharqiya	Dakhliya	Dhahira	Janubiya	Musandam
Irrigation and Dam	60.7	32.5	69.6	65.4	76.5	71.4	18.4	38.4
Agricultural Research	3.1	0.5	4.4	2.9	2.0	1.9	3.6	2.2
Agricultural Extension	4.1	5.5	3.5	6.7	4.2	4.6	1.5	10.6
Agricultural Production	4.3	5.5	5.8	4.7	2.4	3.4	2.4	6.5
Livestock	13.5	6.9	8.2	10.9	8.6	10.7	39.8	21.6
Distribution	5.1	29.2	3.0	4.1	2.5	4.1	5.7	1.1
Processing	1.9	4.1	1.9	1.1	1.2	0.7	3.3	1.3
Inter-Sectoral Projects	7.4	15.9	3.5	4.3	2.6	3.2	25.2	18.4
Total	100	100	100	100	100	100	100	100

Table 6.3.3 Sectoral Investment Distribution by Region (%)

Sector	Total	Muscat	Batinah	Sharqiya	Dakhliya	Dhahira	Janubiya	Musandam
Irrigation and Dam	100	3.2	40.6	12.8	23.3	15.0	4.3	0.9
Agricultural Research	100	0.9	50.8	11.3	12.0	7.7	16.4	1.0
Agricultural Extension	100	8.2	30.4	19.5	18.8	14.3	5.3	3.6
Agricultural Production	100	7.8	48.5	13.0	10.5	10.1	8.1	2.1
Livestock	100	3.1	21.5	9.6	11.8	10.2	41.7	2.2
Distribution	100	34.5	20.7	9.5	9.1	10.3	15.6	0.3
Processing	100	13.4	36.7	7.0	11.8	4.7	25.5	0.9
Inter-Sectoral Projects	100	13.0	16.7	6.9	6.6	5.5	48.0	3.4
Total	100	6.0	35.4	11.8	18.5	12.7	14.1	1.4

Sharqiya is the region most lagging in agricultural modernization. Preliminary soil surveys indicated 400 km<sup>2</sup> of land (S1, S2, S3) appropriate for irrigated cultivation. Although precise reserves of ground water are unclear, the potential for new water resources development is present.

A "National Water Resources Master Plan" is currently being prepared by MWR for precise identification of water resources in each region. The budget under the 10-year Master Plan for Pilot Projects for Centrally Controlled Irrigation Systems includes the Al Kamil project (50ha) already determined as feasible, and promising projects of around a 100 ha-scale from among those currently being investigated by MWR.

If in addition to the projects already considered under the 10-year Master Plan, any promising and feasible areas for pilot projects for centrally controlled irrigation emerge in the future as the result of on-going study by MWR, these should be incorporated into the Master Plan and corresponding budget outlay should be made, particularly for projects that are identified in the Sharqiya Region where agricultural development is most lagging.

Sectoral agricultural investment allocation by region is shown in Table 6.3.3. The irrigation and dam sector accounts for 61 % of the investment. Next is the livestock sector. Regional allocation trends are basically the same for Batinah, Sharqiya, Dakhliya, Dhahira and Musandam. However, in the case of Muscat, the investment proportion for distribution is relatively higher, while that for livestock and inter-sectoral (including Nejd) development is higher for Janubiya.

Regional investment per unit of cropped area and per capita are shown in Tables 6.3.4 - 6.3.5. Investment per cropped hectare is largest in Janubiya for the five regions excluding Muscat and Musandam. However, it must be noted that the cropped area for Janubiya does not include the 200,000 ha of rangeland and 70,000 ha of natural pasture in the region. The unit area investment for Sharqiya, Dakhliya and Dhahira Regions are all larger than for Batinah, reflecting the need to address the particularly backward levels of agriculture in these regions.

Table 6.3.4 Ratio of Investment/Cropping Area (R.O./ha)

Sector	Total	Muscat	Batinah	Sharqiya	Dakhliya	Dhahira	Janubiya	Musandam	* Maximum/ Minimum
Cropping Area (ha)	55,671	2,115	29,092	8,615	7,728	5,603	1,488	1,030	
Irrigation and Dam	6,420	5,453	4,988	5,291	10,776	9,546	10,286	3,014	2.04
Agricultural Research	327	76	318	238	283	250	2,006	175	8.43
Agricultural Extension	431	926	250	543	585	612	858	827	3.43
Agricultural Production	450	921	418	378	340	451	1,361	507	4.00
Livestock	1,425	1,161	586	880	1,215	1,437	22,218	1,689	37.92
Distribution	540	4,904	214	330	355	551	3,155	88	14.72
Processing	196	690	138	89	167	91	1,868	99	21.03
Inter-Sectoral Projects	784	2,674	250	347	372	430	14,080	1,439	56.25
Total	10,573	16,805	7,162	8,096	14,093	13,368	55,832	7,838	7.80

Note:(\*) exclude Muscat and Musandam

Table 6.3.5 Ratio of Investment/Omani Population (R.O./capita)

Sector	Total	Muscat	Batinah	Sharqiya	Dakhliya	Dhahira	Janubiya	Musandam	* Maximum/ Minimum
Omani Population in 1990	1,218,344	158,763	406,202	203,606	183,345	118,413	125,361	22,654	
Irrigation and Dam	293	73	357	224	454	452	122	137	3.72
Agricultural Research	15	1	23	10	12	12	24	8	2.36
Agricultural Extension	20	12	18	23	25	29	10	38	2.84
Agricultural Production	21	12	30	16	14	21	16	23	2.09
Livestock	65	15	42	37	51	68	264	77	7.08
Distribution	25	65	15	14	15	26	37	4	2.68
Processing	9	9	10	4	7	4	22	5	N.A.
Inter-Sectoral Projects	36	36	18	15	16	20	167	65	11.38
Total	483	224	513	343	594	633	663	356	1.93

Note:(\*) exclude Muscat and Musandam

In terms of per capita, the investment rate is highest for Janubiya out of the five regions excluding Muscat and Musandam. The reason for this is that numerous high priority projects, as discussed previously, are concentrating on this region. The differential rate in per capita investment among the five regions is a factor of 1.9, which is within acceptable limits.

Also, a comparison of per capita investment in Batinah and the other regions of Sharqiya, Dakhliya and Dhahira reveals that with the exception of Sharqiya, the investment rate in this regard is higher than for Batinah, indicating that regional allocation of funding is directed at bringing balance into skewed levels of development between regions.

Nevertheless, it is important that efforts at balanced development in the agricultural sector be complemented by programs under other government agencies in the areas of rural housing, education, etc.

#### 6.4 Regional Development Plan

Regional agricultural development plan under the target budget of R.O. 589 million is as follows:

(1) Muscat

(a) Irrigation and dams

- Construction of recharge dams at Willayat Quriyat and falaj rehabilitation in proportion to cropped area.

(b) Agriculture

- Establishment of Development Support Communication Center, sponsoring of International Agriculture and Food Exhibition, and strengthening of two existing plant quarantine stations.
- Establishment of Agricultural Technology Information Units in existing extension centers.



(c) Livestock

- Establishment of concentrate feed plant of Livestock Input Company in harbor vicinity.
- Implementation of appropriate project load for NLL-2, NLE-1, NLM-1, NLL-4 and NLL-5 in proportion to livestock head number in region. The JICA team estimates of livestock numbers based on 1982 GRM study are given in Table 6.4.1.
- Strengthening of animal quarantine station at one location.

(d) Others

- Strengthening of facilities at MAF headquarters.
- Establishment of central wholesale markets at Muttrah and Seeb.
- Strengthening of facilities at PAMAP headquarters and other distribution facilities under PAMAP.
- Establishment of processing facilities for dates, limes and tomatoes, as well as a pilot plant for pickling.

Breakdown and sectoral share for investment in the Muscat Region are shown in Table 6.4.2.

(2) Batinah

(a) Irrigation and dams

- Construction of recharge dams, modern irrigation projects, and centrally controlled water distribution systems towards recharge of groundwater resources and economical water use. Of the 42 recharge dam sites under the Master Plan, 20 are in Batinah. Of 21 sites for pilot projects for centrally controlled irrigation, 8 are located in the region, for a total benefit area of 4,000 ha.
- Project load for modern irrigation facilities and falaj rehabilitation in proportion to cropped area in the region.
- Batinah is also considered promising for F/S studies and pilot projects for underground dam.

(b) Agriculture

- Strengthening of facilities at Rumais Agricultural Research

Table 6.4.1 Animal Unit Distribution Ratio by Region

Region	goats (Animal Head)	sheep	cattle	AnimalU.	%	Modified %
Muscat	24,000	7,500	2,100	8,400	2.9	3
Batinah	216,300	67,200	18,500	75,200	25.7	25
Sharquiya	113,000	22,500	9,600	36,700	12.6	12
Dakhaliya	93,100	13,100	7,900	29,140	10.0	10
Dhahira	117,100	18,300	9,400	36,480	12.5	12
Janubiya	106,200	4,000	77,900	99,940	34.2	35
Musandam	26,500	3,100	500	6,420	2.2	3
Total	696,200	135,700	125,900	292,280	100	100
Animal Unit	139,240	27,140	125,900			

Source: JICA estimation

Note: Calculation method of Animal Unit is:

Goats and Sheep: Head numberx0.2--①

Cattle : Head numberx1.0--②

①+②=Animal Unit of each Region

Table 6.4.2 Regional Budget in Muscat - 10-Year Plan

(UNIT: 1000 R.O.)

SECTOR	PROJECT NUMBER	NAME OF PROJECT/PROGRAM	7 REGIONS TOTAL BUDGET (1)	MUSCAT REGION BUDGET (2)	SHARE BY REGION (%) (2)/(1)	SHARE BY SECTOR (%)
			357,397	11,534	3.2	32.5
Irrigation and Dam	NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	60,990			
	NW-2	Subsidy for New Irrigation System Project	37,500	750	2.0	2.1
	NW-3	Legal Framework for Agricultural Water Use	250	10	4.0	0.0
	NW-4	Recharge Dams	86,633	4,750	5.5	13.4
	NW-5	Sub-surface (Underground) Dams	5,000			
	NW-6	Aflaj	113,420	5,600	4.9	15.8
	NW-7	Wells	30,240	205	0.7	0.6
	NW-8	Springs	5,914			
	NW-9	Erosion Control and Protection of Agricultural Land against Floods	11,510			
	NW-10	Survey and Monitoring	5,940	219	3.7	0.6
			18,200	160	0.9	0.5
Agricultural Research	NAR-1	Support for Agricultural Research Stations	5,300			
	NAR-2	Establishment of New Research Units and Laboratories	5,600			
	NAR-3	Development and Establishment of Experimental Farms and Nurseries	2,000			
	NAR-4	Forestry-Improvement Program	2,000	80	4.0	0.2
	NAR-5	Establishment of Locust Survey and Central Unit	2,000	80	4.0	0.2
	NAR-6	Soil Surveys	1,300			
			24,000	1,959	8.2	5.5
Agricultural Extension	NAE-1	Improvement and Development of Extension Centers and Facilities	4,470	172	3.8	0.5
	NAE-2	Establishment of Development Support Communication Center(DSCC)	1,190	1,190	100.0	3.3
	NAE-3	Training of Researchers, Extension Staff and Statistics Staff	2,520	77	3.1	0.2
	NAE-4	Intensive Extension Guidance Program	15,820	520	3.3	1.5
			25,060	1,948	7.8	5.5
Agricultural Production	NAA-1	Collection and Organization of Agricultural Statistics	2,560	77	3.0	0.2
	NAA-2	Agricultural Exhibitions and Festivals	1,400	971	69.4	2.7
	NAA-3	National Project for Plant Protection and Aerial Spraying	10,000	300	3.0	0.8
	NAA-4	Agricultural Technology Transfer to Farmers Project	10,000	300	3.0	0.8
	NAQ-1	Development and Improvement of Plant Quarantine	1,100	300	27.3	0.8
			79,320	2,455	3.1	6.9
Livestock	NLL-1	Rangeland Revegetation Project in Southern Region	3,552			
	NLL-2	Animal Health and Disease Control Project	31,424	793	2.5	2.2
	NLE-1	Livestock Extension Development Project	632	9	1.4	0.0
	NLR-1	Livestock Research Development Project	6,550			
	NLM-1	Livestock Marketing Improvement Project	7,604	91	1.2	0.3
	NLL-3	Livestock Input Company Project	1,359	983	72.3	2.8
	NLL-4	Small Farm Development Support Project	25,899	510	2.0	1.4
	NLL-5	Livestock Specialized Services Program	2,300	69	3.0	0.2
			30,068	10,372	34.5	29.2
Distribution	ND-1	Establishment of Wholesale Market	18,326	7,213	39.5	20.4
	ND-2	Supply and Demand Forecast of Agricultural Produce	444	444	100.0	1.2
	ND-3	Establishment of Shipping Organization for Farmers	1,220	165	13.5	0.5
	ND-4	Fortification of PAMAP	10,078	2,520	25.0	7.1
			10,918	1,460	13.4	4.1
Agricultural Produce Processing	NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	5,100	204	4.0	0.6
	NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	1,410	449	31.8	1.3
	NP-3	Establishment of Pickling and Vinegar-Processing Plant	1,782	807	45.3	2.3
	NP-4	Establishment of Coconut-Processing Plant	2,626			
			43,644	5,655	13.0	15.9
Inter-Sectoral	NI-1	Integrated Agricultural Development Project in Nejd	16,553			
	NI-2	Improvement and Maintenance of MAF Facilities	20,991	5,511	26.3	15.5
	NI-3	Artificial Rainfall Project	2,500			
	OI-1	Citizen's Compensation against Natural Crisis	3,000	120	4.0	0.3
	OI-2	Master Plan for Development of Date Palm Cultivation	600	24	4.0	0.1
Total			588,606	35,543	6.0	100.0

- Center as the focus for basic agricultural research with impact on the country as a whole. Also, an agricultural research station would be established at Sohar, given the importance of agriculture in northern Batinah for the nation as a whole.
- Establishment of nurseries for fruit trees at two locations.
  - Establishment of five new extension sub-centers in remote areas.
  - Given the comparative disadvantage of poor quality dates grown in Batinah, allocation under the date extension program would be relatively less than the proportional amount of date cropped area in the region.
  - Workload for other programs in proportion to cropped area in the region.
  - Establishment of Agricultural Technology Information Units in both existing and new extension centers.

(c) Livestock

- Strengthening of facilities at Rumais Livestock Research Center and CIVL. A training center adjacent to the Rumais Livestock Research Center would also be constructed.
- Of the total small poultry holders targeted throughout all regions under the Small Holder Poultry Production Project, 535 are to be created through subsidy in Batinah.
- Other livestock project load in proportion to numbers of livestock in the region.
- One new animal quarantine station and two new animal clinics will be established. Facilities at one existing animal clinic will be strengthened.

(d) Others

- Facilities of the Directorate General of Agriculture at Sohar will be strengthened.
- Establishment of wholesale markets at Sohar and Rustaq.
- New construction and strengthening of existing distribution facilities under PAMAP.
- Construction of pickling plant at Sohar and Barka.
- Strengthening of facilities at MAF dates processing plant at Rustaq.

Breakdown and sectoral share for investment in Batinah Region are shown in Table 6.4.3.

(3) Sharqiya

(a) Irrigation and dams

- Construction of recharge dams, modern irrigation projects and centrally controlled water distribution for groundwater recharge and economical water use. Recharge dams are to be constructed at four locations. Study of new development potential for water resources is to be continued, referring to findings of the "National Water Resources Master Plan" of MWR.
- Implementation of pilot projects for centrally controlled irrigation at four locations for total benefit area of 400 ha. Of these, the Al Kamil project (50 ha) has already been determined as feasible and would be scheduled for implementation in 1991. Project load for new irrigation facility projects and falaj rehabilitation would be in proportion to cropped area in the region.

(b) Agriculture

- Establishment of Al Kamil Agricultural Research Station.
- Establishment of one new extension sub-center in remote area.
- Implementation of soil survey, given promising farmland in the region.
- Relatively heavier outlay under the date extension program, given the superior dates grown in the region.
- Remaining program outlay in proportion to cropped area in the region.
- Establishment of Agricultural Technology Information Units in both existing and new extension centers.
- Afforestation research and pilot project to counter desertification at edge of Wahiba desert.

(c) Livestock

- Establishment of one new animal clinic and strengthening of

Table 6.4.3 Regional Budget in Batinah - 10-Year Plan

(UNIT: 1000 R.O.)

SECTOR	PROJECT NUMBER	NAME OF PROJECT/PROGRAM	7 REGIONS TOTAL BUDGET (1)	BATINAH REGION BUDGET (2)	SHARE BY REGION (%) (2)/(1)	SHARE BY SECTOR (%)
Irrigation and Dam			357,397	145,106	40.6	69.6
	NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	60,990	36,960	60.6	17.7
	NW-2	Subsidy for New Irrigation System Project	37,500	20,625	55.0	9.9
	NW-3	Legal Framework for Agricultural Water Use	250	128	51.2	0.1
	NW-4	Recharge Dams	86,633	43,137	49.8	20.7
	NW-5	Sub-surface (Underground) Dams	5,000	2,765	55.3	1.3
	NW-6	Aflaj	113,420	26,130	23.0	12.5
	NW-7	Wells	30,240	9,427	31.2	4.5
	NW-8	Springs	5,914			
	NW-9	Erosion Control and Protection of Agricultural Land against Floods	11,510	3,185	27.7	1.5
	NW-10	Survey and Monitoring	5,940	2,749	46.3	1.3
Agricultural Research			18,200	9,240	50.8	4.4
	NAR-1	Support for Agricultural Research Stations	5,300	2,000	37.7	1.0
	NAR-2	Establishment of New Research Units and Laboratories	5,600	5,250	93.8	2.5
	NAR-3	Development and Establishment of Experimental Farms and Nurseries	2,000	450	22.5	0.2
	NAR-4	Forestry-Improvement Program	2,000	500	25.0	0.2
	NAR-5	Establishment of Locust Survey and Central Unit	2,000	1,040	52.0	0.5
	NAR-6	Soil Surveys	1,300			
Agricultural Extension			24,000	7,285	30.4	3.5
	NAE-1	Improvement and Development of Extension Centers and Facilities	4,470	1,290	28.9	0.6
	NAE-2	Establishment of Development Support Communication Center(DSCC)	1,190			
	NAE-3	Training of Researchers, Extension Staff and Statistics Staff	2,520	1,145	45.4	0.5
	NAE-4	Intensive Extension Guidance Program	15,820	4,850	30.7	2.3
Agricultural Production			25,060	12,151	48.5	5.8
	NAA-1	Collection and Organization of Agricultural Statistics	2,560	1,280	50.0	0.6
	NAA-2	Agricultural Exhibitions and Festivals	1,400	71	5.1	0.0
	NAA-3	National Project for Plant Protection and Aerial Spraying	10,000	5,400	54.0	2.6
	NAA-4	Agricultural Technology Transfer to Farmers Project	10,000	5,400	54.0	2.6
	NAQ-1	Development and Improvement of Plant Quarantine	1,100			
Livestock			79,320	17,045	21.5	8.2
	NLL-1	Rangeland Revegetation Project in Southern Region	3,552			
	NLL-2	Animal Health and Disease Control Project	31,424	7,499	23.9	3.6
	NLE-1	Livestock Extension Development Project	632	241	38.1	0.1
	NLR-1	Livestock Research Development Project	6,550	2,446	37.3	1.2
	NLH-1	Livestock Marketing Improvement Project	7,604	196	2.6	0.1
	NLL-3	Livestock Input Company Project	1,359			
	NLL-4	Small Farm Development Support Project	25,899	6,088	23.5	2.9
	NLL-5	Livestock Specialized Services Program	2,300	575	25.0	0.3
Distribution			30,068	6,236	20.7	3.0
	ND-1	Establishment of Wholesale Market	18,326	2,468	13.5	1.2
	ND-2	Supply and Demand Forecast of Agricultural Produce	444			
	ND-3	Establishment of Shipping Organization for Farmers	1,220	397	32.5	0.2
	ND-4	Fortification of PAMAP	10,078	3,371	33.5	1.6
Agricultural Produce Processing			10,918	4,009	36.7	1.9
	NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	5,100	2,652	52.0	1.3
	NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	1,410	466	33.1	0.2
	NP-3	Establishment of Pickling and Vinegar-Processing Plant	1,782	891	50.0	0.4
	NP-4	Establishment of Coconut-Processing Plant	2,626			
Inter-Sectoral			43,644	7,282	16.7	3.5
	NI-1	Integrated Agricultural Development Project in Nejd	16,553			
	NI-2	Improvement and Maintenance of MAF Facilities	20,991	5,410	25.8	2.6
	NI-3	Artificial Rainfall Project	2,500			
	OI-1	Citizen's Compensation against Natural Crisis	3,000	1,560	52.0	0.7
	OI-2	Master Plan for Development of Date Palm Cultivation	600	312	52.0	0.1
Total			588,606	208,353	35.4	100.0

facilities at 1 existing animal clinic.

- Establishment of 550 poultry small holders under subsidy program.
- Other livestock project load to be implemented in proportion to number of livestock in the region.

(d) Others

- Strengthening of existing Directorate General of Agriculture facilities at Ibra.
- Establishment of local wholesale markets at Sur and Ibra.

Breakdown and sectoral share for investment in Sharqiya Region are shown in Table 6.4.4.

(4) Dakhliya

(a) Irrigation and dams

- Construction of recharge dams, modern irrigation projects and centrally controlled water distribution systems for groundwater recharge and economical water use, given the threatened nature of water resources in the region. Recharge dams would be constructed at seven locations, and pilot projects for centrally controlled irrigation at four locations, for a total benefit area of 950 ha.
- New irrigation and falaj rehabilitation project load would be in proportion to cropped area in the region.

(2) Agriculture

- Establishment of Jimmah Agricultural Research Station, to conduct research on dates and field crops.
- Establishment of one extension sub-center in remote area.
- Relatively heavier outlay under the date extension program, given the superior dates grown in the region.
- Establishment of nursery for dates, grapes, etc., at one location.
- Remaining program outlay in proportion to cropped area in the region.
- Establishment of Agricultural Technology Information Units in

Table 6.4.4 Regional Budget in Sharqiya - 10-Year Plan

(UNIT: 1000 R.O.)

SECTOR	PROJECT NUMBER	NAME OF PROJECT/PROGRAM	7 REGIONS TOTAL BUDGET (1)	SHARQIYA REGION BUDGET (2)	SHARE BY REGION (%) (2)/(1)	SHARE BY SECTOR (%)
			357,397	45,586	12.8	65.4
Irrigation and Dam	NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	60,990	3,060	5.0	4.4
	NW-2	Subsidy for New Irrigation System Project	37,500	4,875	13.0	7.0
	NW-3	Legal Framework for Agricultural Water Use	250	38	15.2	0.1
	NW-4	Recharge Dams	86,633	8,401	9.7	12.0
	NW-5	Sub-surface (Underground) Dams	5,000	35	0.7	0.1
	NW-6	Aflaj	113,420	19,830	17.5	28.4
	NW-7	Wells	30,240	7,638	25.3	11.0
	NW-8	Springs	5,914			
	NW-9	Erosion Control and Protection of Agricultural Land against Floods	11,510	1,050	9.1	1.5
	NW-10	Survey and Monitoring	5,940	659	11.1	0.9
			18,200	2,050	11.3	2.9
Agricultural Research	NAR-1	Support for Agricultural Research Stations	5,300	850	16.0	1.2
	NAR-2	Establishment of New Research Units and Laboratories	5,600			
	NAR-3	Development and Establishment of Experimental Farms and Nurseries	2,000	300	15.0	0.4
	NAR-4	Forestry-Improvement Program	2,000	300	15.0	0.4
	NAR-5	Establishment of Locust Survey and Central Unit	2,000	300	15.0	0.4
	NAR-6	Soil Surveys	1,300	300	23.1	0.4
			24,000	4,676	19.5	6.7
Agricultural Extension	NAE-1	Improvement and Development of Extension Centers and Facilities	4,470	611	13.7	0.9
	NAE-2	Establishment of Development Support Communication Center(DSCC)	1,190			
	NAE-3	Training of Researchers, Extension Staff and Statistics Staff	2,520	265	10.5	0.4
	NAE-4	Intensive Extension Guidance Program	15,820	3,800	24.0	5.4
			25,060	3,255	13.0	4.7
Agricultural Production	NAA-1	Collection and Organization of Agricultural Statistics	2,560	384	15.0	0.6
	NAA-2	Agricultural Exhibitions and Festivals	1,400	71	5.1	0.1
	NAA-3	National Project for Plant Protection and Aerial Spraying	10,000	1,400	14.0	2.0
	NAA-4	Agricultural Technology Transfer to Farmers Project	10,000	1,400	14.0	2.0
	NAQ-1	Development and Improvement of Plant Quarantine	1,100			
			79,320	7,580	9.6	10.9
Livestock	NLL-1	Rangeland Revegetation Project in Southern Region	3,552			
	NLL-2	Animal Health and Disease Control Project	31,421	3,227	10.3	4.6
	NLE-1	Livestock Extension Development Project	632	36	5.7	0.1
	NLR-1	Livestock Research Development Project	6,550			
	NLM-1	Livestock Marketing Improvement Project	7,604	108	1.4	0.2
	NLL-3	Livestock Input Company Project	1,359			
	NLL-4	Small Farm Development Support Project	25,899	3,933	15.2	5.6
	NLL-5	Livestock Specialized Services Program	2,300	276	12.0	0.4
				30,068	2,843	9.5
Distribution	ND-1	Establishment of Wholesale Market	18,326	1,682	9.2	2.4
	ND-2	Supply and Demand Forecast of Agricultural Produce	411			
	ND-3	Establishment of Shipping Organization for Farmers	1,220	165	13.5	0.2
	ND-4	Fortification of PAHAP	10,078	997	9.9	1.4
			10,918	765	7.0	1.1
Agricultural Produce Processing	NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	5,100	765	15.0	1.1
	NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	1,410			
	NP-3	Establishment of Pickling and Vinegar-Processing Plant	1,782			
	NP-4	Establishment of Coconut-Processing Plant	2,626			
			43,644	2,990	6.9	4.3
Inter-Sectoral	NI-1	Integrated Agricultural Development Project in Nejd	16,553			
	NI-2	Improvement and Maintenance of HAF Facilities	20,991	2,450	11.7	3.5
	NI-3	Artificial Rainfall Project	2,500			
	OI-1	Citizen's Compensation against Natural Crisis	3,000	450	15.0	0.6
	OI-2	Master Plan for Development of Date Palm Cultivation	600	90	15.0	0.1
Total			588,606	69,746	11.8	100.0



both existing and new extension centers.

(3) Livestock

- Strengthening of facilities at existing Livestock Research Center at Wadi Quriyat.
- Consulting service to operate modern research facilities and transfer of technology regarding the same.
- Strengthening of facilities at one existing animal clinic.
- Promotion of artificial insemination and improvement of dairy cow breed for medium and small dairy farmers in areas adjacent to the capital region.
- Establishment of a poultry breeding farm for supply of broilers under Livestock Input Company at Wadi Quriyat .
- Establishment of 670 small poultry holders under subsidy program.
- Other livestock project load to be carried out in proportion to number of livestock in the region.

(d) Others

- Strengthening of existing Directorate General of Agriculture facilities at Nizwa.
- Establishment of local wholesale markets at Nizwa and Samail.
- New construction and strengthening of existing distribution facilities under PAMAP.
- Strengthening of facilities at MAF date processing plant at Nizwa.
- Establishment of pickling plant at Bahla.

Breakdown and sectoral share for investment in the Dakhliya Region are shown in Table 6.4.5.

(5) Dhahira

(a) Irrigation and dams

- Construction of recharge dams, modern irrigation facilities and centrally controlled water distribution systems for groundwater recharge and economical water use. Although locally there are both areas of excessive drafting and areas of resource surplus in

Table 6.4.5 Regional Budget in Dakhliya - 10-Year Plan

(UNIT: 1000 R.O.)

SECTOR	PROJECT NUMBER	NAME OF PROJECT/PROGRAM	7 REGIONS TOTAL BUDGET (1)	DAKHLIYA REGION BUDGET (2)	SHARE BY REGION (%) (2)/(1)	SHARE BY SECTOR (%)
Irrigation and Dam			357,397	83,274	23.3	76.5
	NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	60,990	9,300	15.2	8.5
	NW-2	Subsidy for New Irrigation System Project	37,500	5,250	14.0	4.8
	NW-3	Legal Framework for Agricultural Water Use	250	35	14.0	0.0
	NW-4	Recharge Dams	86,633	13,373	15.4	12.3
	NW-5	Sub-surface (Underground) Dams	5,000	2,130	42.6	2.0
	NW-6	Aflaj	113,420	40,810	36.0	37.5
	NW-7	Wells	30,240	5,434	18.0	5.0
	NW-8	Springs	5,914			
	NW-9	Erosion Control and Protection of Agricultural Land against Floods	11,510	5,700	49.5	5.2
	NW-10	Survey and Monitoring	5,940	1,242	20.9	1.1
			18,200	2,185	12.0	2.0
Agricultural Research	NAR-1	Support for Agricultural Research Stations	5,300	850	16.0	0.8
	NAR-2	Establishment of New Research Units and Laboratories	5,600	75	1.3	0.1
	NAR-3	Development and Establishment of Experimental Farms and Nurseries	2,000	550	27.5	0.5
	NAR-4	Forestry-Improvement Program	2,000	280	14.0	0.3
	NAR-5	Establishment of Locust Survey and Central Unit	2,000	280	14.0	0.3
	NAR-6	Soil Surveys	1,300	150	11.5	0.1
			24,000	4,523	18.8	4.2
Agricultural Extension	NAE-1	Improvement and Development of Extension Centers and Facilities	4,470	937	21.0	0.9
	NAE-2	Establishment of Development Support Communication Center(DSCC)	1,190			
	NAE-3	Training of Researchers, Extension Staff and Statistics Staff	2,520	326	12.9	0.3
	NAE-4	Intensive Extension Guidance Program	15,820	3,260	20.6	3.0
			25,060	2,629	10.5	2.4
Agricultural Production	NAA-1	Collection and Organization of Agricultural Statistics	2,560	358	14.0	0.3
	NAA-2	Agricultural Exhibitions and Festivals	1,400	71	5.1	0.1
	NAA-3	National Project for Plant Protection and Aerial Spraying	10,000	1,100	11.0	1.0
	NAA-4	Agricultural Technology Transfer to Farmers Project	10,000	1,100	11.0	1.0
	NAQ-1	Development and Improvement of Plant Quarantine	1,100			
			79,320	9,389	11.8	8.6
Livestock	NLL-1	Rangeland Revegetation Project in Southern Region	3,552			
	NLL-2	Animal Health and Disease Control Project	31,424	2,649	8.4	2.4
	NLE-1	Livestock Extension Development Project	632	30	4.7	0.0
	NLR-1	Livestock Research Development Project	6,550	1,973	30.1	1.8
	NLM-1	Livestock Marketing Improvement Project	7,604	100	1.3	0.1
	NLL-3	Livestock Input Company Project	1,359	376	27.7	0.3
	NLL-4	Small Farm Development Support Project	25,899	4,031	15.6	3.7
	NLL-5	Livestock Specialized Services Program	2,300	230	10.0	0.2
			30,068	2,745	9.1	2.5
Distribution	ND-1	Establishment of Wholesale Market	18,325	1,682	9.2	1.5
	ND-2	Supply and Demand Forecast of Agricultural Produce	444			
	ND-3	Establishment of Shipping Organization for Farmers	1,220	165	13.5	0.2
	ND-4	Fortification of PAMAP	10,078	899	8.9	0.8
			10,918	1,293	11.8	1.2
Agricultural Produce Processing	NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	5,100	714	14.0	0.7
	NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	1,410	495	35.1	0.5
	NP-3	Establishment of Pickling and Vinegar-Processing Plant	1,782	84	4.7	0.1
	NP-4	Establishment of Coconut-Processing Plant	2,626			
			43,644	2,874	6.6	2.6
Inter-Sectoral	NI-1	Integrated Agricultural Development Project in Nejd	16,553			
	NI-2	Improvement and Maintenance of MAF Facilities	20,991	2,370	11.3	2.2
	NI-3	Artificial Rainfall Project	2,500			
	OI-1	Citizen's Compensation against Natural Crisis	3,000	420	14.0	0.4
	OI-2	Master Plan for Development of Date Palm Cultivation	600	84	14.0	0.1
			588,606	108,912	18.5	100.0
Total						

the region, the overall trend in Dhahira is one of overdrafting of groundwater. Recharge dams would be constructed at seven locations and pilot projects for centrally controlled irrigation at four locations for a total benefit area of 650 ha.

- New irrigation and falaj rehabilitation project load would be in proportion to cropped area in the region.
- A proportionately heavier outlay would be made for the Buraimi area at the border with UAE.

(b) Agriculture

- Establishment of new agricultural research station at Ibri.
- Establishment of three extension sub-centers in remote areas.
- Relatively heavier outlay under the date extension program, given the superior quality of dates grown in the region.
- Strengthening of existing facilities at one existing plant quarantine station, and new establishment of one station.
- Remaining program outlay in proportion to cropped area in the other region.
- Establishment of Agricultural Technology Information Units in both existing and new extension centers.

(c) Livestock

- Establishment of one new animal clinic.
- Establishment of two new animal quarantine stations.
- Establishment of 295 small poultry holders under subsidy program.
- Other livestock project load to be carried out in proportion to number of livestock in the region.

(d) Others

- Strengthening of existing Directorate General of Agriculture facilities at Ibri.
- Establishment of wholesale markets at Ibri and Buraimi.

Breakdown and sectoral share for investment in the Dhahira Region are shown in Table 6.4.6.

(6) Janubiya

Table 6.4.6 Regional Budget in Dhahira - 10-Year Plan

(UNIT: 1000 R.O.)

SECTOR	PROJECT NUMBER	NAME OF PROJECT/PROGRAM	7 REGIONS TOTAL BUDGET (1)	DHAHIRA REGION BUDGET (2)	SHARE BY REGION (%) (2)/(1)	SHARE BY SECTOR (%)
Irrigation and Dam	NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	357,397	53,487	15.0	71.4
	NW-2	Subsidy for New Irrigation System Project	60,990	7,050	11.6	9.4
	NW-3	Legal Framework for Agricultural Water Use	37,500	3,375	9.0	4.5
	NW-4	Recharge Dams	250	25	10.0	0.0
	NW-5	Sub-surface (Underground) Dams	86,633	13,122	15.1	17.5
	NW-6	Aflaj	5,000	35	0.7	0.0
	NW-7	Wells	113,420	21,050	18.6	28.1
	NW-8	Springs	30,240	7,024	23.2	9.4
	NW-9	Erosion Control and Protection of Agricultural Land against Floods	5,914			
	NW-10	Survey and Monitoring	11,510	1,050	9.1	1.4
Agricultural Research	NAR-1	Support for Agricultural Research Stations	5,940	756	12.7	1.0
	NAR-2	Establishment of New Research Units and Laboratories	18,200	1,400	7.7	1.9
	NAR-3	Development and Establishment of Experimental Farms and Nurseries	5,300	600	11.3	0.8
	NAR-4	Forestry-Improvement Program	5,600			
	NAR-5	Establishment of Locust Survey and Central Unit	2,000	200	10.0	0.3
	NAR-6	Soil Surveys	2,000	200	10.0	0.3
Agricultural Extension	NAE-1	Improvement and Development of Extension Centers and Facilities	1,300	150	11.5	0.2
	NAE-2	Establishment of Development Support Communication Center(DSCC)	24,000	3,428	14.3	4.6
	NAE-3	Training of Researchers, Extension Staff and Statistics Staff	4,470	743	16.6	1.0
	NAE-4	Intensive Extension Guidance Program	1,190			
Agricultural Production	NAA-1	Collection and Organization of Agricultural Statistics	25,060	2,527	10.1	3.4
	NAA-2	Agricultural Exhibitions and Festivals	2,560	256	10.0	0.3
	NAA-3	National Project for Plant Protection and Aerial Spraying	1,400	71	5.1	0.1
	NAA-4	Agricultural Technology Transfer to Farmers Project	10,000	900	9.0	1.2
	NAQ-1	Development and Improvement of Plant Quarantine	10,000	900	9.0	1.2
Livestock	NLL-1	Rangeland Revegetation Project in Southern Region	1,100	400	36.4	0.5
	NLL-2	Animal Health and Disease Control Project	79,320	8,051	10.2	10.7
	NLE-1	Livestock Extension Development Project	3,552			
	NLR-1	Livestock Research Development Project	31,424	4,575	14.6	6.1
	NLM-1	Livestock Marketing Improvement Project	632	36	5.7	0.0
	NLL-3	Livestock Input Company Project	6,550			
	NLL-4	Small Farm Development Support Project	7,604	108	1.4	0.1
	NLL-5	Livestock Specialized Services Program	1,359			
			25,899	3,056	11.8	4.1
Distribution	ND-1	Establishment of Wholesale Market	2,300	276	12.0	0.4
	ND-2	Supply and Demand Forecast of Agricultural Produce	30,068	3,087	10.3	4.1
	ND-3	Establishment of Shipping Organization for Farmers	18,326	2,468	13.5	3.3
	ND-4	Fortification of PAMAP	444			
Agricultural Produce Processing	NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	1,220	165	13.5	0.2
	NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	10,078	455	4.5	0.6
	NP-3	Establishment of Pickling and Vinegar-Processing Plant	10,918	510	4.7	0.7
	NP-4	Establishment of Coconut-Processing Plant	5,100	510	10.0	0.7
Inter-Sectoral	NI-1	Integrated Agricultural Development Project in Nejd	43,644	2,410	5.5	3.2
	NI-2	Improvement and Maintenance of MAF Facilities	16,553			
	NI-3	Artificial Rainfall Project	20,991	2,050	9.8	2.7
	OI-1	Citizen's Compensation against Natural Crisis	2,500			
	OI-2	Master Plan for Development of Date Palm Cultivation	3,000	300	10.0	0.4
Total			588,606	74,901	12.7	100.0

(a) Irrigation and dams

- Irrigation project in the central Salalah plain to counter water resource depletion, and one recharge dam at Wadi Darbart where water resources are plentiful.
- Construction of one centrally controlled water distribution system at the Salalah plain with benefit area of 500 ha.
- New irrigation and falaj rehabilitation project load in proportion to cropped area in the region.
- Improvement of 300 out of the 400 springs scattered throughout the Jabal Region as livestock water source.
- Integrated Agricultural Development in Nejd Region on confirmed aquifer development based on the results of the JICA study. Development would start with a 50 ha pilot project to be monitored for subsequent implementation of a project with benefit area of 500 ha. At present, MAF is conducting a separate study aimed at development of 1,000 ha in the same area, and project scale under the Master Plan would be subject to modification as the results of this study become known.

(b) Agriculture

- Strengthening of facilities at the existing Salalah Agricultural Research Station. This was originally planned under the Third Five-year Development Plan and then postponed for implementation under the next Five-year Development Plan.
- Establishment of a new nursery for coconuts, papayas, etc. adjacent to the Salalah Agricultural Research Station.
- Establishment of an Arabian coffee experimental farm in the Jabal Region.
- Establishment of research facilities for irrigation, honey bees, and medicinal and perfume plants.
- Agricultural extension facilities to be established under Nejd pilot project.
- Wide-scale soil survey for implementation of Integrated Agricultural Development for the Nejd Region Project.
- Research and project implementation towards afforestation in the Jabal Region.

- Strengthening of facilities at one existing plant quarantine station and establishment of one new station.
- Establishment of Agricultural Technology Information Units in both existing and new extension centers.

(c) Livestock

- Rangeland Revegetation Project to preserve 200,000 ha of rangeland.
- Strengthening of facilities at eight existing animal clinics, and construction of five new facilities.
- Establishment of one new veterinary laboratory at Salalah.
- Strengthening of facilities at the existing Salalah Livestock Research Center and consultancy services in modern research management.
- Establishment of the Company for Livestock Products through both public and private financing.
- Establishment of training center adjacent to Salalah Livestock Research Center for training key farmers.
- Construction and operation of livestock processing plant, and guidance in marketing distribution and subsidy from the government for the on-going destocking project.
- Establishment of a fattening farm by the public corporation at Nejd to upgrade beef quality.
- Establishment of small new animal quarantine stations at two locations.
- Establishment of 480 small poultry holders under subsidy program.
- Other livestock project load to be carried out in proportion to number of livestock in the region.

(d) Others

- Strengthening of existing Directorate General of Agriculture facilities at Salalah.
- Establishment of a central wholesale market at Salalah.
- New construction and strengthening of distribution of facilities under PAMAP.
- Construction of new coconut processing plant at Salalah.

Breakdown and sectoral share for investment in the Janubiya Region are shown in Table 6.4.7.

(7) Musandam

(a) Irrigation and dams

- Construction of a recharge dam at one site.
- New irrigation and falaj rehabilitation project load in proportion to cropped area in the region.

(b) Agriculture

- Construction of new experimental farm at Khasab.
- Construction of two new extension sub-centers in remote areas.
- Remaining program outlay in proportion to cropped area in the region.
- Establishment of Agricultural Technology Information Units in both existing and new extension centers.

(d) Livestock

- Establishment of one new livestock quarantine station.
- Establishment of 45 small poultry holders under subsidy program.
- Other livestock project load to be in proportion to number of livestock in the region.

(e) Others

- Strengthening of existing Directorate General of Agriculture facilities at Khasab.

Breakdown and sectoral share for investment in the Musandam Region are shown in Table 6.4.8.

Table 6.4.7 Regional Budget in Janubiya - 10-Year Plan

(UNIT: 1000 R.O.)

SECTOR	PROJECT NUMBER	NAME OF PROJECT/PROGRAM	7 REGIONS TOTAL BUDGET (1)	JANUBIYA REGION BUDGET (2)	SHARE BY REGION (%) (2)/(1)	SHARE BY SECTOR (%)
Irrigation and Dam			357,397	15,306	4.3	18.4
	NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	60,990	4,620	7.6	5.6
	NW-2	Subsidy for New Irrigation System Project	37,500	2,250	6.0	2.7
	NW-3	Legal Framework for Agricultural Water Use	250	8	3.2	0.0
	NW-4	Recharge Dams	86,633	1,450	1.7	1.7
	NW-5	Sub-surface (Underground) Dams	5,000	35	0.7	0.0
	NW-6	Aflaj	113,420			
	NW-7	Wells	30,240	307	1.0	0.4
	NW-8	Springs	5,914	5,914	100.0	7.1
	NW-9	Erosion Control and Protection of Agricultural Land against Floods	11,510	525	4.6	0.6
	NW-10	Survey and Monitoring	5,940	197	3.3	0.2
Agricultural Research			18,200	2,985	16.4	3.6
	NAR-1	Support for Agricultural Research Stations	5,300	1,000	18.9	1.2
	NAR-2	Establishment of New Research Units and Laboratories	5,600	275	4.9	0.3
	NAR-3	Development and Establishment of Experimental Farms and Nurseries	2,000	350	17.5	0.4
	NAR-4	Forestry-Improvement Program	2,000	600	30.0	0.7
	NAR-5	Establishment of Locust Survey and Central Unit	2,000	60	3.0	0.1
	NAR-6	Soil Surveys	1,300	700	53.8	0.8
Agricultural Extension			24,000	1,277	5.3	1.5
	NAE-1	Improvement and Development of Extension Centers and Facilities	4,470	433	9.7	0.5
	NAE-2	Establishment of Development Support Communication Center(DSCC)	1,190			
	NAE-3	Training of Researchers, Extension Staff and Statistics Staff	2,520	334	13.3	0.4
	NAE-4	Intensive Extension Guidance Program	15,820	510	3.2	0.6
Agricultural Production			25,060	2,025	8.1	2.4
	NAA-1	Collection and Organization of Agricultural Statistics	2,560	154	6.0	0.2
	NAA-2	Agricultural Exhibitions and Festivals	1,400	71	5.1	0.1
	NAA-3	National Project for Plant Protection and Aerial Spraying	10,000	700	7.0	0.8
	NAA-4	Agricultural Technology Transfer to Farmers Project	10,000	700	7.0	0.8
	NAQ-1	Development and Improvement of Plant Quarantine	1,100	400	36.4	0.5
Livestock			79,320	33,061	41.7	39.8
	NLL-1	Rangeland Revegetation Project in Southern Region	3,552	3,552	100.0	4.3
	NLL-2	Animal Health and Disease Control Project	31,424	11,692	37.2	14.1
	NLE-1	Livestock Extension Development Project	632	271	42.9	0.3
	NLR-1	Livestock Research Development Project	6,550	2,131	32.5	2.6
	NLM-1	Livestock Marketing Improvement Project	7,604	6,988	91.9	8.4
	NLL-3	Livestock Input Company Project	1,359			
	NLL-4	Small Farm Development Support Project	25,899	7,621	29.4	9.2
	NLL-5	Livestock Specialized Services Program	2,300	805	35.0	1.0
Distribution			30,068	4,694	15.6	5.6
	ND-1	Establishment of Wholesale Market	18,326	2,783	15.2	3.3
	ND-2	Supply and Demand Forecast of Agricultural Produce	411			
	ND-3	Establishment of Shipping Organization for Farmers	1,220	165	13.5	0.2
	ND-4	Fortification of PAMAP	10,078	1,746	17.3	2.1
Agricultural Produce Processing			10,918	2,779	25.5	3.3
	NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	5,100	153	3.0	0.2
	NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	1,410			
	NP-3	Establishment of Pickling and Vinegar-Processing Plant	1,782			
	NP-4	Establishment of Coconut-Processing Plant	2,626	2,626	100.0	3.2
Inter-Sectoral			43,644	20,951	48.0	25.2
	NI-1	Integrated Agricultural Development Project in Nejd	16,553	16,553	100.0	19.9
	NI-2	Improvement and Maintenance of MAP Facilities	20,991	1,790	8.5	2.2
	NI-3	Artificial Rainfall Project	2,500	2,500	100.0	3.0
	OI-1	Citizen's Compensation against Natural Crisis	3,000	90	3.0	0.1
	OI-2	Master Plan for Development of Date Palm Cultivation	600	18	3.0	0.0
Total			588,606	83,078	14.1	100.0



Table 6.4.8 Regional Budget in Musandam - 10-Year Plan

(UNIT: 1000 R.O.)

SECTOR	PROJECT NUMBER	NAME OF PROJECT/PROGRAM	7 REGIONS TOTAL BUDGET (1)	HUSANDAM REGION BUDGET (2)	SHARE BY REGION (%) (2)/(1)	SHARE BY SECTOR (%)
Irrigation and Dam			357,397	3,104	0.9	38.4
	NW-1	Improvement of Irrigation System and Centrally-Controlled Water-Distribution System	60,990			
	NW-2	Subsidy for New Irrigation System Project	37,500	375	1.0	4.6
	NW-3	Legal Framework for Agricultural Water Use	250	6	2.4	0.1
	NW-4	Recharge Dams	86,633	2,400	2.8	29.7
	NW-5	Sub-surface (Underground) Dams	5,000			
	NW-6	Aflaj	113,420			
	NW-7	Wells	30,240	205	0.7	2.5
	NW-8	Springs	5,914			
	NW-9	Erosion Control and Protection of Agricultural Land against Floods	11,510			
	NW-10	Survey and Monitoring	5,940	118	2.0	1.5
Agricultural Research			18,200	180	1.0	2.2
	NAR-1	Support for Agricultural Research Stations	5,300			
	NAR-2	Establishment of New Research Units and Laboratories	5,600			
	NAR-3	Development and Establishment of Experimental Farms and Nurseries	2,000	100	5.0	1.2
	NAR-4	Forestry-Improvement Program	2,000	40	2.0	0.5
	NAR-5	Establishment of Locust Survey and Central Unit	2,000	40	2.0	0.5
	NAR-6	Soil Surveys	1,300			
Agricultural Extension			24,000	852	3.6	10.6
	NAE-1	Improvement and Development of Extension Centers and Facilities	4,470	284	6.4	3.5
	NAE-2	Establishment of Development Support Communication Center(DSCC)	1,190			
	NAE-3	Training of Researchers, Extension Staff and Statistics Staff	2,520	88	3.5	1.1
	NAE-4	Intensive Extension Guidance Program	15,820	480	3.0	5.9
Agricultural Production			25,060	522	2.1	6.5
	NAA-1	Collection and Organization of Agricultural Statistics	2,560	51	2.0	0.6
	NAA-2	Agricultural Exhibitions and Festivals	1,400	71	5.1	0.9
	NAA-3	National Project for Plant Protection and Aerial Spraying	10,000	200	2.0	2.5
	NAA-4	Agricultural Technology Transfer to Farmers Project	10,000	200	2.0	2.5
	NAQ-1	Development and Improvement of Plant Quarantine	1,100			
Livestock			79,320	1,740	2.2	21.5
	NLL-1	Rangeland Revegetation Project in Southern Region	3,552			
	NLL-2	Animal Health and Disease Control Project	31,424	988	3.1	12.2
	NLE-1	Livestock Extension Development Project	632	9	1.4	0.1
	NLR-1	Livestock Research Development Project	6,550			
	NLM-1	Livestock Marketing Improvement Project	7,604	13	0.2	0.2
	NLL-3	Livestock Input Company Project	1,359			
	NLL-4	Small Farm Development Support Project	25,899	660	2.5	8.2
	NLL-5	Livestock Specialized Services Program	2,300	69	3.0	0.9
Distribution			30,068	91	0.3	1.1
	ND-1	Establishment of Wholesale Market	18,326			
	ND-2	Supply and Demand Forecast of Agricultural Produce	444			
	ND-3	Establishment of Shipping Organization for Farmers	1,220			
	ND-4	Fortification of PAMAP	10,078	91	0.9	1.1
Agricultural Produce Processing			10,918	102	0.9	1.3
	NP-1	Establishment of Private Company for Agro-Industry and Supply of Agricultural Inputs and Services	5,100	102	2.0	1.3
	NP-2	Establishment of Agro-Industrial Complex for Processing of Dates, Limes and Tomatoes	1,410			
	NP-3	Establishment of Pickling and Vinegar-Processing Plant	1,782			
	NP-4	Establishment of Coconut-Processing Plant	2,626			
Inter-Sectoral			43,644	1,482	3.4	18.4
	NI-1	Integrated Agricultural Development Project in Nejd	16,553			
	NI-2	Improvement and Maintenance of MAF Facilities	20,991	1,410	6.7	17.5
	NI-3	Artificial Rainfall Project	2,500			
	OI-1	Citizen's Compensation against Natural Crisis	3,000	60	2.0	0.7
	OI-2	Master Plan for Development of Date Palm Cultivation	600	12	2.0	0.1
Total			588,606	8,073	1.4	100.0