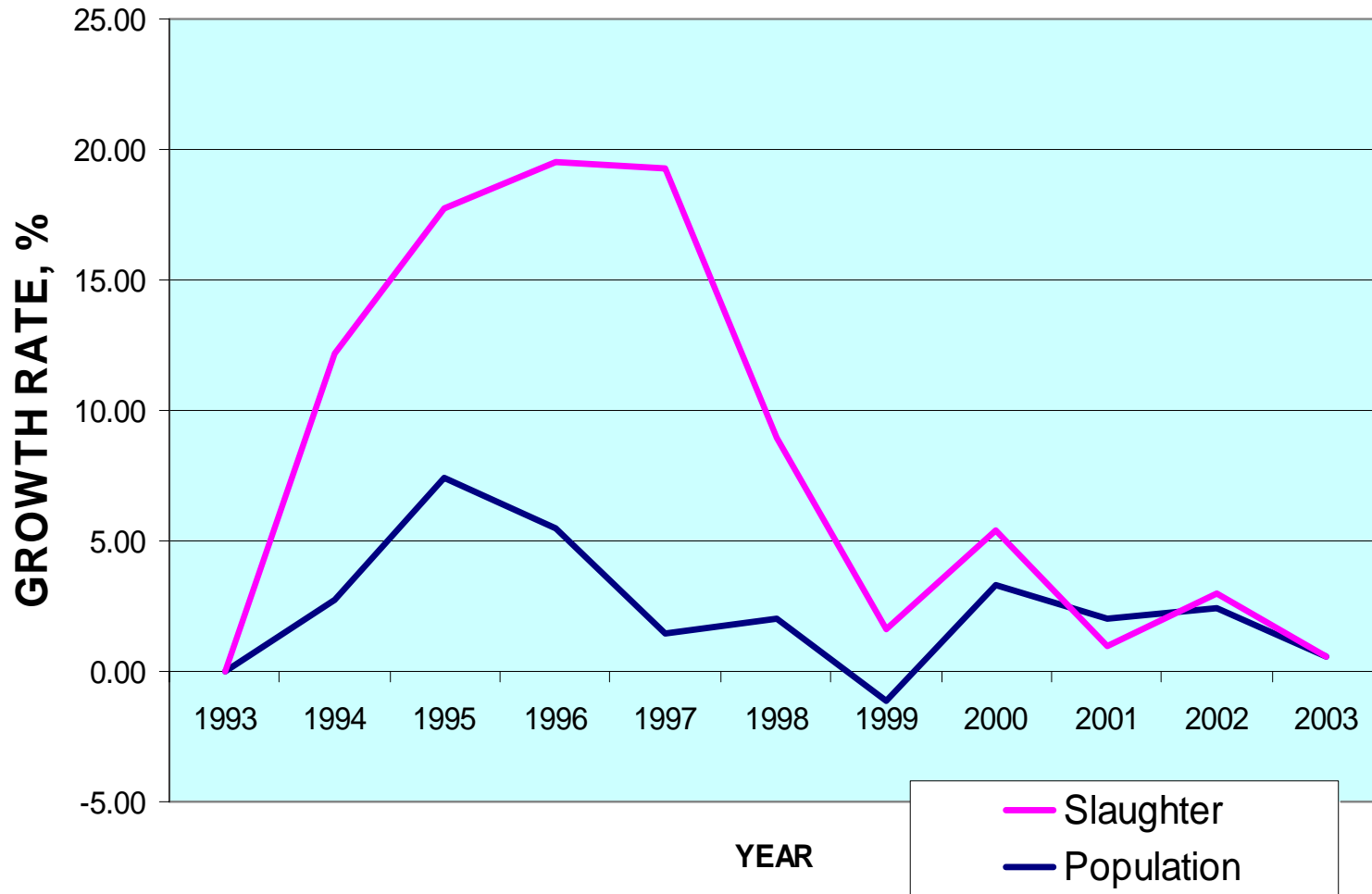


ROAD MAP:
GOAT INDUSTRY
DEVELOPMENT

Patterns of Goat Inventory & Slaughter Rate



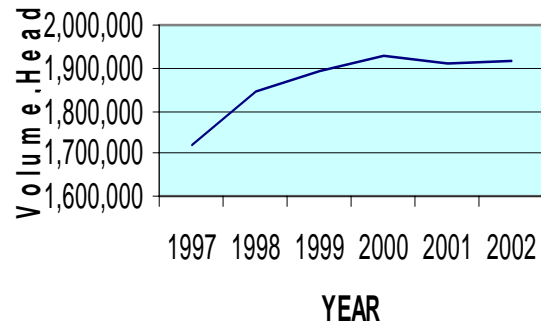
Goat Inventory and Slaughter Rate

Year	Population		Current Prices		Slaughtered Animals			
	Number	Growth Rate (%)	Value (in Million Pesos)	Growth Rate (%)	Volume	Liveweight Farmgate Price (P/Kg)	Value (in Billion Pesos)	Growth Rate (%)
1997	3,024,980		2849.28		1,718,400	41.21	1.70	
1998	3,085,465	2.00	2935.56	3.03	1,843,650	41.40	1.83	7.29
1999	3,050,957	-1.12	3324.76	13.26	1,893,970	44.89	2.04	2.73
2000	3,151,472	3.29	3321.14	-0.11	1,927,110	44.31	2.05	1.75
2001	3,214,764	2.01	4034.37	21.48	1,912,500	55.03	2.53	-0.76
2002	3,293,727	2.46	4151.59	2.91	1,917,281	57.13	2.63	0.25
AAGR ¹		1.72		7.82				2.21

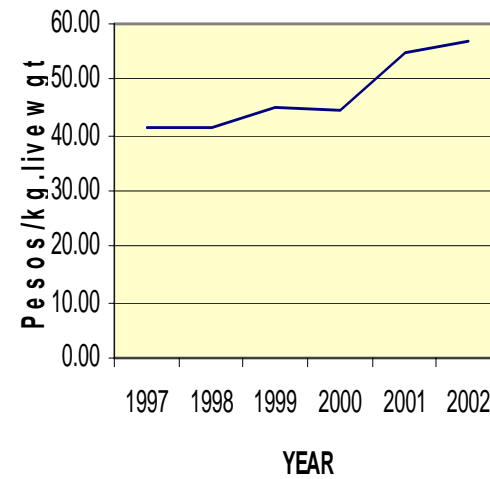
¹Annual Average Growth Rate

Source: BAS

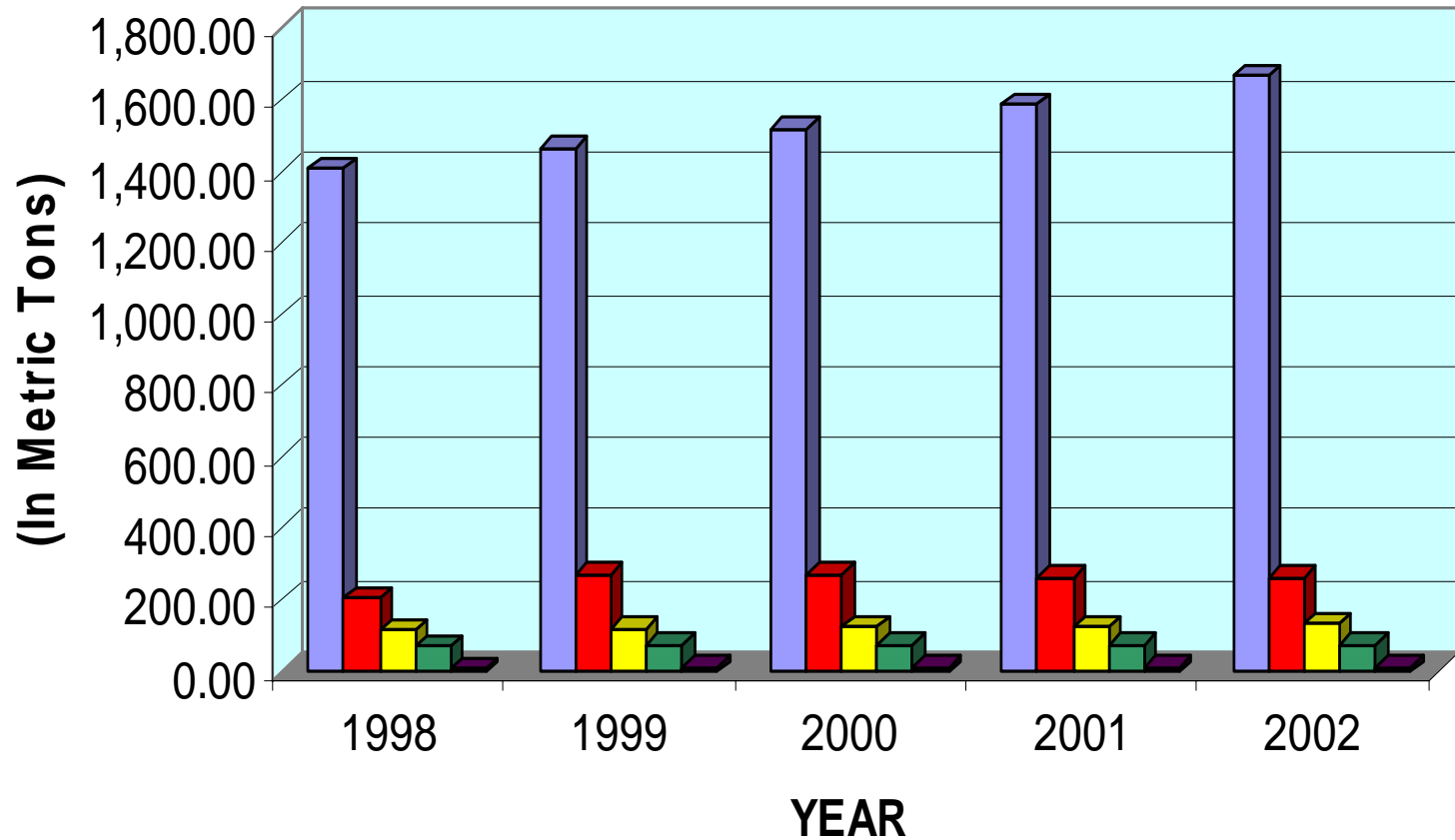
PATTERNS IN ANIMAL SLAUGHTER, 1991-2002



Farm Gate Prices, P/kg liveweight

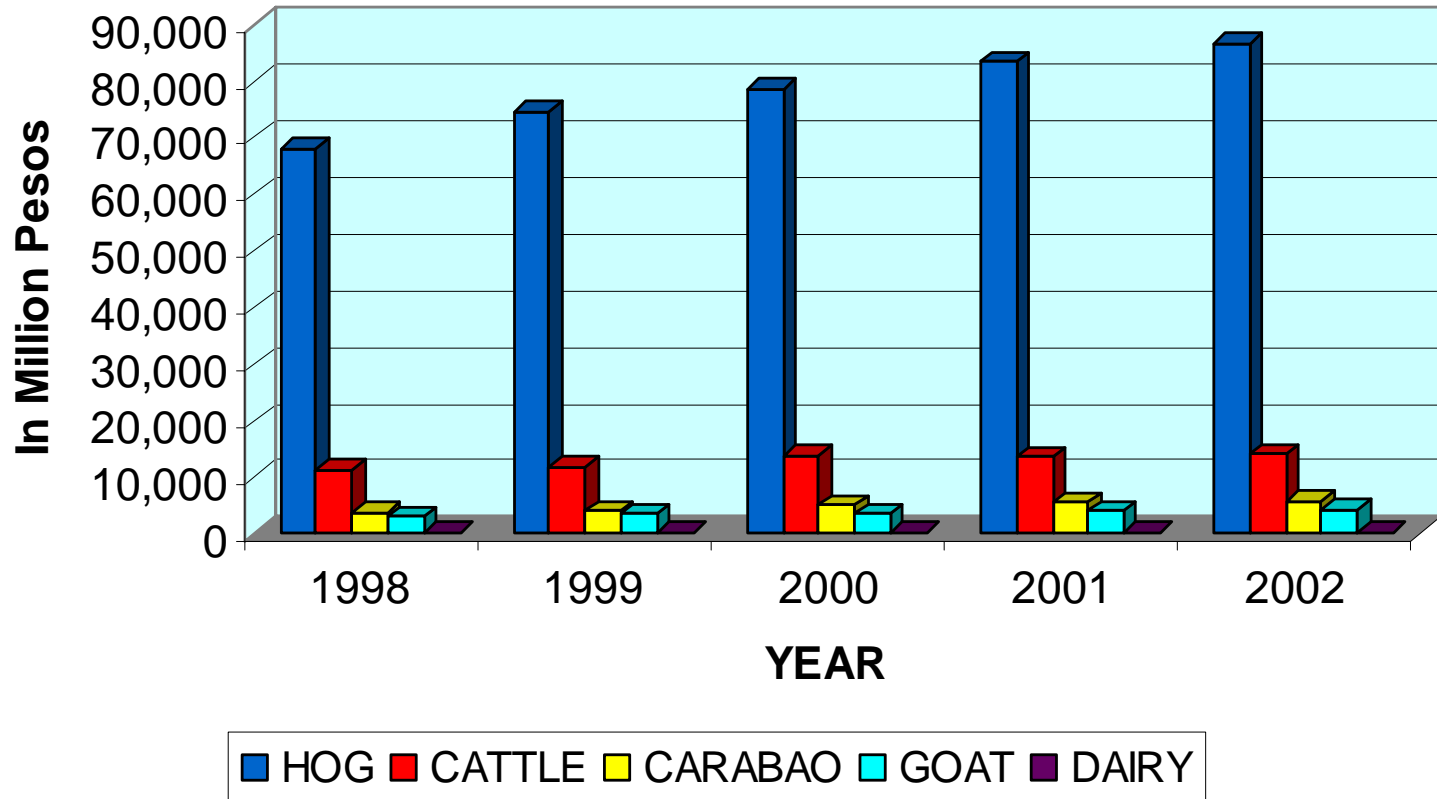


VOLUME OF LIVESTOCK PRODUCTION

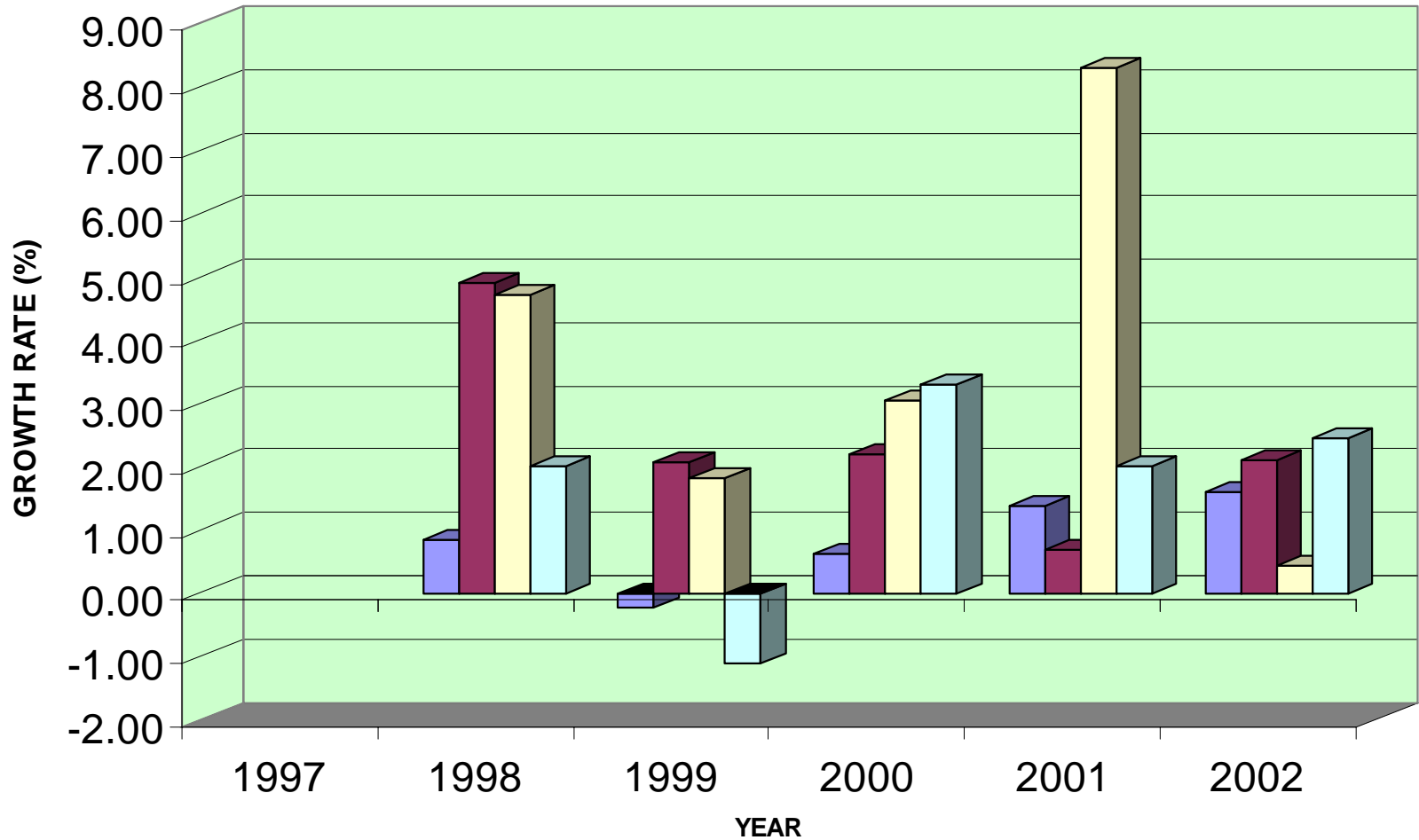


■ HOG ■ CATTLE ■ CARABAO ■ GOAT ■ DAIRY

VALUE OF LIVESTOCK PRODUCTION



COMPARATIVE PRODUCTION GROWTH RATE OF LIVESTOCK



■ Carabao ■ Cattle ■ Hog ■ Goat

Livestock Population Growth Rate

Year	Livestock							
	Carabao		Cattle		Hog		Goat	
	Inventory	Growth Rate	Inventory	Growth Rate	Inventory	Growth Rate	Inventory	Growth Rate
1997	2,987,780		2,266,284		9,752,180		3,024,980	
1998	3,013,194	0.85	2,377,102	4.89	10,210,470	4.70	3,085,465	2.00
1999	3,005,989	-0.24	2,425,929	2.05	10,397,000	1.83	3,050,957	-1.12
2000	3,024,403	0.61	2,478,853	2.18	10,712,920	3.04	3,151,472	3.29
2001	3,065,813	1.37	2,495,601	0.68	11,603,140	8.31	3,214,764	2.01
2002	3,115,087	1.61	2,547,819	2.09	11,652,700	0.43	3,293,727	2.46
AAGR ¹		0.84		2.37		3.63		1.72

¹Annual Average Growth Rate

Source : BAS

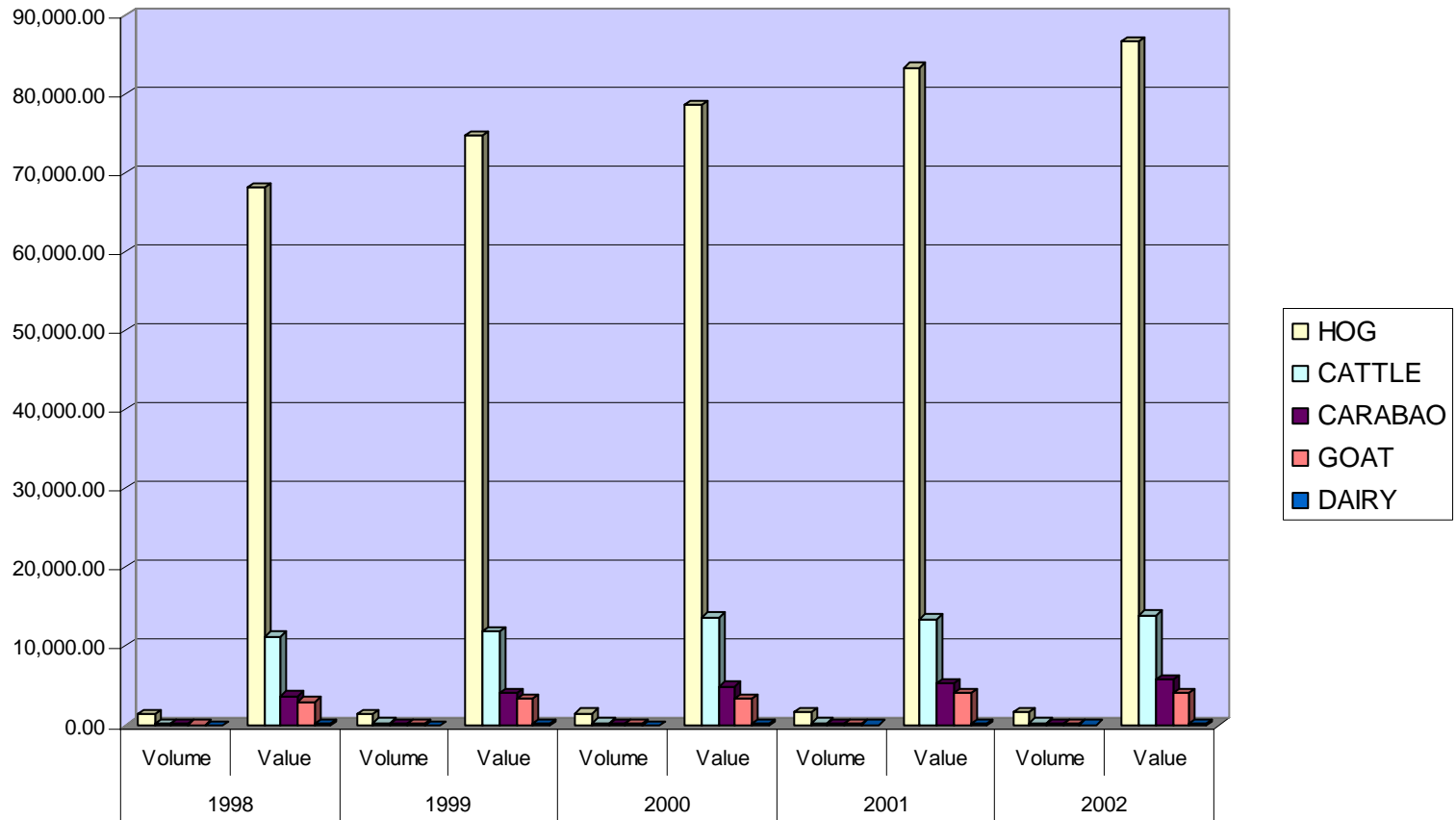
Comparative Volume and Value of Livestock and Poultry Production

SUB-SECTOR	1998		1999		2000		2001		2002	
	Vdume	Value	Vdume	Value	Vdume	Value	Vdume	Value	Vdume	Value
HOG	1,406.59	68,206	1,466.68	74,727	1,517.79	78,682	1,584.52	83,393	1,667.76	86,723.52
CATTLE	260.81	11,249	271.24	11,813	271.56	13,714	261.16	13,429	261.06	13,951.00
CARABAO	113.05	3,701	118.95	4,097	123.98	4,900	125.14	5,298	132.40	5,796.00
GOAT	71.95	2,936	73.90	3,325	75.19	3,321	74.60	4,034	74.79	4,152.00
DAIRY	9.24	116	9.85	126	10.21	140	10.80	149	11.00	160.00
TOTAL LIVESTOCK	1,861.64	86,208	1,940.62	94,088	1,998.73	100,757	2,056.22	106,303	2,147.01	110,782.52
CHICKEN MEAT	919.45	49,733	929.16	48,707	997.82	56,327	1,098.80	65,390	1,173.75	66,552
DUCK MEAT	51.29	2,569	51.23	2,683	51.49	2,760	53.52	3,121	54.11	3,001
CHICKEN EGGS	227.04	11,513	229.88	12,400	243.38	13,926	246.70	14,755	260.82	16,630
DUCK EGGS	53.1	2,401	52.65	2,490	53.47	2,220	53.92	2,369	53.63	2,430
TOTAL POULTRY	1,250.88	66,216.00	1,262.92	66,280.00	1,346.16	75,233.00	1,452.94	85,635.00	1,542.31	88,613.00

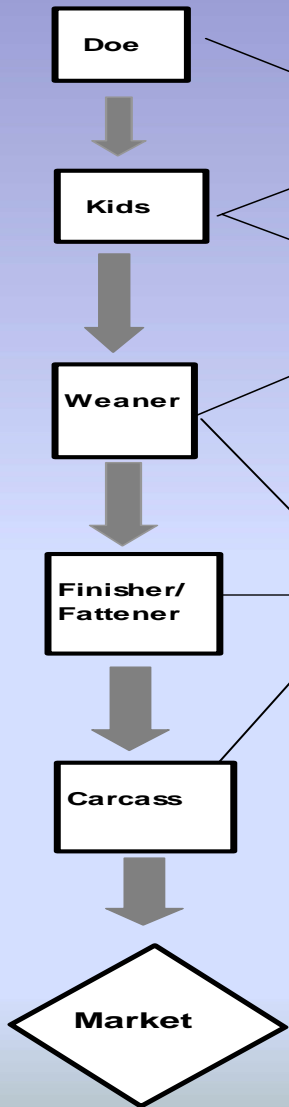
Source: BAS

(Vdume in Thousand MT; Value in Milion Pesos)

Comparative Volume and Value of Livestock Production



Supply Chain Analysis



Breeding

Growing/
Weaning

Transport,
Slaughtering,
Storage

Production:

Fixed Costs	7.65	
Stocks	14.1	21.75
Feeds	4.05	25.8
Medicines & Supplements	1.84	27.64
Labor	12.75	40.39
Overhead	2.34	42.73
Cost/kg of chevon produced		130

Post Production:

Transport & Handling	3.2	133.2
Processing	2.69	135.89
Transport & Handl	4.61	140.5
Trading Costs & Margin	1.74	142.24

□ Farmgate & wholesale prices

Farmgate Price: 75
Wholesale Price: 160

No Record of Chevon Importation

Constraints

- ❑ High mortality rate due to diseases and parasites.
- ❑ Insufficient breeder base: quantity & quality.
- ❑ Inadequate support services i.e. extension, credit, research & development.
- ❑ Absence of a focused development plan for the industry.

Strengths to Build On

- ❑ Bullish Interest
 - ❑ Private Sector – Bacolod, Nueva Ecija, Pampanga, Pangasinan, Tarlac
 - ❑ LGUs – Ilocos, Quezon, Lanao, ARMM
 - ❑ RFUs – Regions II, VI, Palawan
- ❑ Markets: Demand is higher than supply
- ❑ Technology: available, relatively simple
- ❑ A Population Base: Something to build on

Goat Population by Regions

Region	Year			
	2000	2001	2002	2003 ^P
CAR	36,785	43,431	52,380	54,127
I	420,898	437,145	442,745	456,791
II	107,921	117,710	130,383	140,671
III	257,531	255,517	243,382	234,081
IV	211,961	234,670	239,694	254,849
V	74,991	79,445	88,662	93,189
VI	359,608	357,694	358,885	353,879
VII	465,462	492,123	486,903	486,028
VIII	73,709	70,011	70,776	72,335
IX	147,912	137,098	143,839	123,785
X	196,456	193,088	186,290	186,752
XI	327,243	320,368	333,662	321,632
XII	204,505	212,464	228,308	239,518
CARAGA	80,281	84,812	99,041	106,271
ARMM	186,209	179,188	188,950	187,816
TOTAL	3,151,472	3,214,764	3,293,900	3,311,724

^P = preliminary

Program Thrusts and Targets

- ❑ Decrease the mortality rate by 50% from 45%-60% to 25%
- ❑ Increase the current reproduction efficiency from 1.72% to 10%
- ❑ Increase the slaughter weight from 15 kg. to 20 kg.

Strategy I. Partnerships

By and among...

- National Government Agencies
- Regional Field units
- Local Government
- Private sector
- Livestock groups/associations
- NGOs/Pos
- Academe

Towards ...

- Policy Formulation
- Programs/Projects
- Research and Development
- Creation of the Small Ruminant Board

Strategy II . Genetic Improvement

- Seed Stock Production
- Upgrading
- Accreditation and Registration of Breeder Farms and Stock

Towards Top Quality Breeders for Commercial and Backyard Farms

Strategy III. Promote low-cost Disease Control Measures

Techno and Info dissemination

- Technical assistance

- Field Schools

- Info Materials

- Training and Seminar

- RFU's/LGU's

- Farmer Organization

Focus on Deworming

Strategy IV. Continuing Development/ Dissemination of Technology Packages (Extension Service)

- ❑ Centers of Technology Development/
Dissemination
 - ❑ Luzon – CLSU
 - ❑ Visayas – DA-RFU-VIII
 - ❑ Mindanao – Mindanao Baptist Rural Life
Center

PROJECTED PRODUCTION

Period	Chevon Production (m.t.)
Three years ago	33,142
2003	33,550
2004	36,906

Development Approach: Clustering Production Areas

Ilocos
Cagayan
Valley

Central Luzon
South Tagalog

North Mindanao
South Mindanao
ARMM

Eastern Visayas
Western Visayas
Central Visayas

...Building on Population and Current Initiatives

Program Benefits, 2003-2007

Item	Total	Value (million pesos)
Jobs created	9,189	2.30
Meat produced (mt)	42,991	6,878.58

Patterns in Production & Consumption Trend

Region	Production (kg)	Consumption (kg)		
		Carcass	Offals	Total
CAR	533,524	402,452	131,071	533,524
I	4,509,641	3,401,753	1,107,888	4,509,641
II	1,328,034	1,001,775	326,260	1,328,034
III	2,479,001	1,869,983	609,019	2,479,001
IV	2,441,437	1,841,647	599,790	2,441,437
V	903,079	681,219	221,860	903,079
VI	3,655,473	2,757,430	898,044	3,655,473
VII	4,959,419	3,741,033	1,218,385	4,959,419
VIII	720,899	543,795	177,104	720,899
IX	1,465,092	1,105,162	359,931	1,465,092
X	1,897,483	1,431,326	466,157	1,897,483
XI	3,398,561	2,563,633	834,928	3,398,561
XII	2,325,463	1,754,164	571,299	2,325,463
ARMM	1,924,577	1,451,764	472,813	1,924,577
CARAGA	1,008,796	760,964	247,832	1,008,796
T O T A L	33,550,480	25,308,100	8,242,380	33,550,480

GOAT HERD PROJECTION, 2003 - 2007 (SELECTED REGIONS)						
WITH PROJECT						
PARTICULARS	2002	2003	2004	2005	2006	2007
BEGINNING INVENTORY	2,194,067	2,744,937	3,261,650	3,738,088	4,384,556	5,195,922
Breeders	1,061,270	1,044,309	1,051,794	1,158,043	1,276,403	1,435,852
Male	215,226	195,256	179,215	171,444	166,260	165,242
Female	846,045	849,053	872,578	986,599	1,110,143	1,270,610
Kids	677,089	1,158,957	1,282,690	1,553,893	1,865,039	2,268,038
Male	338,545	579,479	641,345	776,946	932,520	1,134,019
Female	338,545	579,479	641,345	776,946	932,520	1,134,019
Weanlings	455,488	541,671	927,166	1,026,152	1,243,114	1,492,032
Male	227,744	270,836	463,583	513,076	621,557	746,016
Female	227,744	270,836	463,583	513,076	621,557	746,016
¹ Baseline data						
² 10% of Breeders						
³ Excess male from 1:15 male-female breeders' ratio						

GOAT HERD PROJECTION, 2003 - 2007 (SELECTED REGIONS)

WITHOUT PROJECT

PARTICULARS	2002 ¹	2003	2004	2005	2006	2007
BEGINNING INVENTORY	2,194,067	2,231,805	2,270,192	2,309,239	2,348,958	2,389,360
Breeders	1,061,270	1,079,524	1,098,092	1,116,979	1,136,191	1,155,734
Male	215,226	218,927	222,693	226,523	230,420	234,383
Female	846,045	860,597	875,399	890,456	905,772	921,351
Kids	677,089	688,735	700,581	712,631	724,889	737,357
Male	338,545	344,368	350,291	356,316	362,444	368,678
Female	338,545	344,368	350,291	356,316	362,444	368,678
Weanlings	455,488	463,323	471,292	479,398	487,644	496,031
Male	227,744	231,661	235,646	239,699	243,822	248,016
Female	227,744	231,661	235,646	239,699	243,822	248,016
¹ Baseline data						

INVENTORY OF DA GOAT FARMS

As of June 2003

Production Farms	B R E E D						Total
	Anglo Nubian		Boer		Saanen		
	Male	Female	Male	Female	Male	Female	
1. Asean Goat & Sheep Center Bagalupa, Zamboanga Sur	14	38	11	32	9	1	105
2. Cagayan Valley Hillyland - ROS, Tuguegarao	4	11	37	67			119
3. CLSU Small Ruminant Ctr. Muñoz, Nueva Ecija	8	40	14	25			87
4. Cagayan Breeding Center Tuguegarao			59	115			174
5. Sual Breeding Station Sual, Pangasinan	16	22					38
6. CAR Baguio					19	14	33
7. CLIARC Magalang, Pampanga	10	19					29
8. Palayan Livestock Prod'n Ctr. Nueva Ecija	15	5	5	7			32
9. Malitbog Breeding Station Leyte	6	20	14	39			79
10. Ubay Stock Farm Bohol	5	13	7	20			45
11. University of Southern Mindanao, Cotabato					4	15	19
12. Himamaylan Breeding Station Negros Occidental	25	12					37
13. UP-DTRI Los Baños, Laguna					14	28	42
TOTAL	103	180	147	305	46	58	839

GOAT & SHEEP IMPORTATION

YEAR	Date of arrival	Importer	Address	Actual arrival	Category	Origin
2001	23-Feb	Gilbert Larrazabal	No. 2 Wilson St. Lahug Cebu City	4	Sheep	Australia
	11-Mar	Rafael Abello	Tangub, Bacolod City	40	Goat	U.S.A.
	8-Jun	Josefina M. Josen	Nueva Ecija	60	Goat	Australia
	29-Jul	Ramon Revilla	Cavite	15	Goat	Australia
	24-Dec	Jose Maria Hizon	Dolores Junction, San Fernando Pampanga	40	Goat	Australia
2002	6-Jan	Victor Savellano	Vigan, Ilocos Sur	16	Goat	U.S.A.
	7-Mar	DA-RFU 2	Tuguegarao, Cagayan	65	Goat	Australia
	20-Mar	Sinisa Steve Hidosan	LA Paz, Magalang, Pampanga	28	Goat	Australia
2003	2-Jan	Jonathan Tuble	#38 Castacio St. Sta. Mesa Hghts. Q.C.	9	Boer	U.S.A.
	7-Mar	Enrique Zobel	Hacienda Bigaa Inc., Calatagan Batangas	3	Tennessee Fainting	U.S.A.
	25-Mar	Jonathan Tuble	#38 Castacio St. Sta Mesa Hghts. Q.C.	6	Boer	U.S.A.
	18-Jul	Jejomar Binay	Makati City	16	Boer	U.S.A.
	10-Aug	-do-	-do-	12	Boer	U.S.A.
	3-Sep	Manuel Tayag	San Juan, Batangas	217	Boer	Australia

STATUS OF LANA O DEL NORTE GOAT PROJECT

Project /Location	Amount Granted	Status
1. Goat Raising & Development Program - Tubod, Lanao del Norte	P300,000.00	Distributed to 8 Barangays 70 heads were delivered + an extra buck for replacement
2. LGU Goat Multiplier Farm Mt. Torong-Torong, Tubod Lanao del Norte	P350,000.00	Original Stock - 28 Male - 3 ; Female - 25 (Pregnant- 21) Offspring - 12 Male - 4 ; Female - 8 Total Animals - 40
3. Barangay Goat Raising & Dispersal Project(Livelihood Project Under the Poverty Alleviation Program of Gov. Imelda Dimaporo) 310 Barangays of the 22 municipalities of Lanao del Norte	P6,200,000.00 (P20,000.00 per barangay)	Total barangays - 462 Number of barangays that implemented the project - 220 or 48% Unserved barangays - 152 Total number of individual recipients - 3,101 Total goat inventory as of 6-15-03 - 3,978 Original stock - 3,042 Offsprings produced - 936

Status of ARMM Goat Project

Project/Location	Amount Granted	Status
Kambingan at Gatas sa Barangay sa ARMM	P2,000,000.00	Breeder does - 430 Breeder bucks - 43 Beneficiaries - 43 Rural Livestock Families
Sites:		
1. Tapayan, Maguindanao		Beneficiary - 4 Families
2. Pagalungan, Maguindanao		Beneficiary - 6 Families Pasture area was affected by the recent flash Floods.
3. Indang, Maimbung, Sulu		Beneficiary - 10 Families on-going construction & developmnet of goat houses and pasture area
4. Tubigbasag, Tawi-Tawi		Beneficiary - 10 Families Goat houses & forage & pasture areas established. Target date of launching - Oct 8. 2003
5. Lamitan, Basilan		Beneficiary - 10 Families on-going pasture development Delivered 46 head Target date of launching:Oct. 6, 2003
6. Wao, Lanao del Sur		Beneficiary - 3 Families On-going construction of goat houses & establishment of forage and pasture area.

SUMMARY OF SR RAISERS BY REGION
as of January 2003

REGION	No. of Raisers	Population
CAR	12	277
Reg.1	436	10363
Reg. 2	142	4822
Reg.3	201	5938
Reg. 4	81	4077
Reg. 5	26	461
Reg. 6	42	2345
Reg.7	22	1259
Reg. 8	7	420
Reg. 9	55	1298
Reg. 10	137	3161
Reg. 11	71	987
Reg. 12	27	1381
CARAGA	116	2230