

Table A.2.2-19

**THE LIST OF PUBLIC MARKET IN THE CITY OF SANTA CRUZ
(AS OF AUGUST 1998)**

No.	Market	UV	Location
1	Los Pozos	C.V.	
2	La Ramada	10	
3	Siete Calles	C.V.	
4	Abasto 1		3 anillo int. y ext. Av. Piray
5	Mutualista		3 anillo int. y ext. ext. Av. Mutuali
6	Abasto 2		3 anillo int. y ext. Av. Mutuali
7	Seccional Sucre	C.V.	C/Sucre y Cbb.
8	Mira Flores	89	
9	San Juan	82	Villa 1 de Mayo
10	Copacabana	108	Av. Litral B, La Cuchilla
11	Santa Rosa	27	3 anillo extremo
12	Ramafa	27	Av. Santos Dumont
13	La Morita	49	B/La Morita
14	San Luis	31	2 anillo y Roca y Coronado
15	Belen	60	radial 26 y 3 anillo y 4 anillo
16	Cuatro de Noviembre	39	3 anillo B/4 de Noviembre
17	San Jose Obrero	21	B/Lazareto
18	Estacion Argentina	44	B/Estacion Argentina
19	Plan Tesmil	148	Av. Principal Plan 30
20	Vill Union	150	B/Villa
21	San Antonio	127	Km 6 carret Antig. Cbb.
22	Cristian Lopez	51	B/Villa Fatima (Club Hipico)
23	David Trapero	39	C/41 av. Mutualista
24	La Chacarilla	42	Av. Paragua entre 3 y 4 anillo
25	Los Bosques	110	4 anillo carr. Cobb.
26	Sucre	86	Villa 1 de Mayo
27	M. Feria Barrio Lindo	5	Av. Brasil
28	Florida	C.V.	C/Florida
29	Alto San Pedro	27	3 anillo
30	Villa Ortuno	118	pasando La Villa 1 de Mayo
31	Nuevo Palmar	178	Av. Nuevo Palmar

Source: The Municipal Government, Santa Cruz city

Table A.2.2-20 LIST OF SUPERMARKET IN SANTA CRUZ (as of August 1998)

No	Name	Address	Tel	Q'ty of Fruit & Vegetable
1	Supermercado Extra I	C/24 de Septiembre No. 480	35-2054	
2	Supermercado Extra II	Av. El Trompillo	53-4354	
3	Supermercado Extra III	Av. Cristobal de Mendoza	32-6226	
4	Supermercado Florida	C/ Florida No. 187	32-8794	
5	Srpermercado Hipermax	Av. Banzer 3er anillo	42-5353	2,000 tons/year
6	Supermercado Reyes	Av. 26 Febrero No. 517	52-8642	
7	Supermercado Santos Dumont	Av. Santos Dumont 1160 4 to anillo	52-3207	
8	Supermercado Slam	Av. San Martin 1001	42-0623	
9	Supermercado Slam II	Av. Pirai	52-0755	
10	Supermercado Okinawa	C/ Antonio Vaca Dies 255	33-9703	
11	Supermercado Piray srl.	Popular Av. Roque Aguilera No. 2860	52-8191	
12	Supermercado Hamacas	Av. Beni C/3 Este Barrio Hamacas	42-4240	60 - 80 tons/year
13	Super Sur	C/Rene Moreno	32-2294	
14	Super Ekko	Av. Canoto No. 203	36-5333	
15	Supermercado Bambi	C/ Avaroa No. 481	33-2572	
16	Supermercado Americano	Av. Alemana/Total	42-4957	

Remarks: There are 2 more supermarket according to the information of the Association president.
Source: JICA Study Team, 1998

Table A.2.2-21

LIST OF HOTELS IN SANTA CRUZ

No	Name	Address	Tel	Rooms
1	Los Tajibos *****	Av San Martin	421000	
2	Yotaú Hotel and Suites*****	Av San Martin	367799	104 + apartment.
3	House Inn*****	Colon 643	362323	
4	Pantanal Resort*****	Prov. Busch	09782020	
5	Caparuch*****	Av San Martin 1717	423303	
6	Cortez****	Av Cristobal de Mendoza	331234	84
7	Las Americas****	21 de Mayo 356	368778	
8	Las Palmas****	Av El Trompillo 604	520366	
9	La Quinta****	Barrio Urbai	522244	
10	Arenal****	Beni 340	346910	
11	Santa Cruz****	Pari 59	348811	
12	Asturias****	Moldes	339611	
13	Urbari Apartment****	Igmiri 506	522288	
14	Enrico Apart Hotel****	F. Gutierrez 77	362801	
15	Hostal Cañoto****	Florida 45/47	331052	
16	Lido****	21 de Mayo 527	363555	
17	Balneario Villa****	Carr. a Cbba. 5.5km	524201	
18	Canciller Hotel****	Ayacucho 220	361710	
19	Carios****	Av Isabel La Catolica	534034	
20	Canada***	Charcas 595	336295	
21	Tropical Inn***	Espana 353	346666	
22	Libertador***	Libertad/Buenos Aires	351376	
23	Panama***	Ayacucho 240	324246	
24	Felimar***	Ayaucho 445	346677	
25	Sirari Suites***	Los Claveles 497	425967	
26	La Sierra Hotel***	Mons Salvatierra 474	338205	
27	Bolivia**	Libertad 365	336292	
28	Viru Viru**	Junin 338	335298	
29	Roma**	24 de Septiembre 530	323299	
30	Copacabana**	Junin 217	339924	
31	Mediterraneo**	Camiri 71	338804	
32	California**	Charagua 23	346295	
33	Colonial**	Buenos Aires 57		
34	7 Calles**	Suarez de Figueroa	364488	
35	Internacional**	Colon 437	330833	
36	La Paz**	La Paz 69	331728	
37	Italia*	Rene Moreno 167	323119	
38	Amazones*	Junin 214	334583	
39	La Siesta*	Vallegrande 18	349775	

Source: JICA Study Team, 1998

Table A.2.2-22 SEASONAL VARIATION OF COMMODITY-WISE INFLOW VOLUME TO ABASTO

Unit: tons/week

Product	1 st Phase		Study		August		1998		2 nd Phase		November		1998		Total
	Valley	209	Lowland	155	Outside SC	78	Import	240	Total	Valley	197	Low land	Outside SC	Import	
Potato								682 (21.1%)							1,051 (39.1%)
Tomato	114		67					181 (5.6%)	188			2			190 (7.0%)
Pimenton	3		3					6 (0.2%)	15						15 (0.5%)
Onion	16		23		604			643 (19.9%)				54			54 (2.0%)
Lettuce	222							222 (6.9%)	36						36 (1.3%)
Other vegetables	190		138		108			436 (13.5%)	107		20	149			276 (10.3%)
Banana (Platano)			143		623			766 (23.7%)	42		238	620			900 (33.4%)
Pineapple			7					7 (0.2%)			13	68			81 (3.0%)
Watermelon			25		70			95 (2.9%)	34		2				36 (1.3%)
Other fruits	20		88		81		4	193 (6.0%)			40	6			52 (2.0%)
Total	774 (24.0%)		649 (20.1%)		1,564 (48.4%)		244 (7.6%)	3,231 (100%)	619 (22.9%)		313 (11.6%)	962 (35.7%)		797 (29.6%)	2,691 (100%)

Remark: The data of 2nd phase study is multiplied 3.5 for two days' inflow volume. The data of 1st phase study is for successive 7 days' inflow volume.

Source: JICA Study Team, November and August 1998

Table A.2.2-23 RATIO OF TRUCK CAPACITY ENTERING TO ABASTO

	(Unit: %)			
	Less than 5 tons	5 to 10 tons	10 to 20 tons	20 to 30 tons
1 st phase study	49.4	18.9	15.1	16.6
2 nd phase study	50.0	19.4	16.7	13.9

Source: JICA Study Team, August and November 1998

Table A.2.2-24 INCOMING TRUCK CAPACITY BY ITS' ORIGIN

	Less than 5 tons	5 to 10 tons	10 to 20 tons	20 to 30 tons	Total
Valley	22	10	1	2	35 (32.4%)
Low land	5	3	5	2	15 (13.9%)
Outside SC	26	5	8	3	42 (38.9%)
Import	1	3	4	8	16 (14.8%)
Total	54 (50.0%)	21 (19.4%)	18 (16.7%)	15 (13.9%)	108 (100%)

Source: JICA Study Team, November 1998

Table A.2.2-25 DISTRIBUTION OF INCOMING PRODUCT IN ABASTO

Year	Wholesalers in Abasto	Retailers in Abasto	Retailers in other market	Sub-total	Public consumers	Supermarket	Institution	Intermediary outside SC	Unit: tons/week	
									Total	(%)
1994	1,977 (74.6%)	199 (7.5%)	117 (4.4%)	2,313 (87.3%)	211 (6.5%)	358 (14.0%)	2	2,651 (100%)		
1998	2,119 (65.5%)	585 (18.1%)	294 (9.1%)	2,998 (92.8%)	211 (6.5%)	5 (0.2%)	2 (0.1%)	15 (0.5%)	3,231 (100%)	

Source: JICA Study Team, June 1994 and August 1998

Table A.2.2-26 DISTRIBUTION OF PRODUCT FROM WHOLESALERS IN ABASTO

Year	Retailers in Abasto	Retailers in other market	Sub-total	Public consumers	Supermarket	Institutions	Outside SC	Unit: tons/week	
								Total	(%)
1994	312 (15.6%)	1,349 (67.6%)	1,661 (83.2%)	226 (11.3%)	20 (1.0%)	43	90 (4.5%)	1,997 (100%)	
1998	1,127 (53.2%)	451 (21.3%)	1,578 (74.5%)	449 (21.2%)	32 (1.5%)	17 (0.8%)	17 (0.8%)	2,119 (100%)	

Source: JICA Study Team, June 1994 and August 1998

Table A.2.2-27

FARMGATE PRICE OF POTATO IN VALLEY AREAS

	Cultivated area (ha)	Harvest (kg)	Selling price (Bs/kg)	
1	1.25	14,375	0.8	W (F)
2	1.5	24,725	0.66	W (F)
3	3	45,000	0.78	W (F)
4	0.5	5,558	1.13	W (F)
5	0.5	5,125	1.22	W (M)
6	1	16,560	0.69	W (M)
7	5	57,500	1.30	W (F)
8	1	9,200	1.6	W (M)
9	0.75	6,900	1.13	W (M)
10	0.5	9,200	0.70	W (M)
11	3	23,000	0.86	W (M)
12	1	14,950	1.0	W (M)
13	2	11,500	1.39	W (M)
14	2	21,850	1.043	W (M)
15	0.25	3,450	1.56	W (M)
16	4	6,000	1.1	W (M)
17	2	31,050	1.3	W (M)
18	2	18,400	1.56	W (F)
19	0.5	4,025	0.87	W (M)
20	2	23,000	1.13	W (M)
21	1	11,500	1.043	W (M)
22	5	86,250	1.73	W (F)
23	1.5	13,800	0.95	W (F)
24	1	10,350	1.478	W (F)
25	1	10,350	1.39	W (M)
26	1	5,750	0.52	W (M)
27	1	10,350	0.61	W (F)
28	1	5,750	1.50	W (F)
29	2	17,250	1.4	W (M)
30	3	32,200	1.3	W (F)
31	0.5	9,200	1.0	W (F)
32	2	22,000	0.5	W (F)
33	9	93,150	0.74	W (F)
34	4	36,800	0.87	W (F)
35	0.75	9,200	1.30	W (F)
36	2.5	25,875	0.78	W (M)
37	3	44,850	1.2	W (F)
38	3.5	77,750	0.9	W (M)
39	2	20,700	1.74	T
40	1.5	8,050	0.8	W (M)
41	2	34,500	1.2	W (M)
42	6	110,400	1.04	W (M)
43	4	59,800	0.63	W (M)
44	1	9,775	1.3	W (M)
45	1	17,250	1.08	W (M)
46	1	18,400	1.04	W (F)
47	1.5	17,250	0.86	W (F)
48	1.5	12,420	0.9	W (F)
49	0.5	4,600	1.47	W (M)
50	0.25	3,450	1.47	W (M)
51	1	11,500	1.39	W (F)
52	3	44,850	1.65	W (M)
53	0.5	6,900	1.47	R (M)
54	1	11,500	1.04	W (M)
55	1	13,800	1.21	W (M)
56	2	34,500	1.91	W (M)
57	2	23,000	0.9	W (F)
58	0.5	2,300	0.87	W (M)
59	0.33	2,300	1.04	W (M)
60	2	9,200	1.3	W (M)
61	1	11,500	1.21	W (M)
62	2	21,275	1.73	W (M)
63	3	55,200	1.04	W (F)
64	1.5	20,700	0.78	W (F)
65	0.2	1,725	0.87	C (M)
66	0.5	8,050	1.04	W (M)
67	1	5,750	0.782	W (M)
68	1	6,900	1.56	W (M)
69	0.5	2,070	0.87	W (M)
Total	122.78	1,586,858	77.226	
Average	1.78	22,998	1.12	

Remarks: W (F); Sell to wholesaler at field. W (M); Sell to wholesaler at market. R (M); Sell to retailer at market.
T; Sell to transporter at field. C (M); Sell to consumer at market.

Source: JICA Survey Team, Aug., 1998

Table A.2.2-28 MONTHLY CHANGE OF PRICE FOR POTATO (1ST GRADE)

	Jan. 97	Feb. 97	Mar. 97	Apr. 97	May 97	June 97	July 97	Aug. 97	Sep. 97	Oct. 97	Nov. 97	Dec. 97	Jan. 98	Feb. 98	Mar. 98	Apr. 98	May 98	June 98	July 98	
Production cost	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Producers price	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21
Abasto	2.0	1.44	1.26	1.3	1.3	1.4	1.56	2.0	2.15	2.34	2.0	2.1	2.29	2.25	2.8	2.46	2.25	1.74	2.07	2.07
Los Pozos	2.29	2.12	1.65	1.5	1.5	1.6	1.77	2.62	2.75	3.0	2.25	2.0	2.25	2.25	2.0	2.8	2.5	2.75	2.75	2.75
Ramada	2.36	1.65	1.78	1.49	1.53	2.5	1.8	2.59	2.85	3.02	2.0	2.35	2.25	3.0	3.5	2.5	2.75	2.5	2.75	2.75

Source: Production cost; Camara Agropecuario del Oriente, 1997

Producers price; IICA Study Team, 1998

Prices in Abasto Market, Los Pozos and Ramada; Data provided by Santa Cruz Municipal Government, 1998

**Table A.2.2-29 WHOLESALE PRICE FLUCTUATION OF FRUIT AND VEGETABLE
IN SANTA CRUZ
(From January, 1996 to December, 1997)**

Commodity	Unit	Max. price (Bs.)	Min. price (Bs.)	Max./Min.
Potato (Hollandesa)	@	23.53	8.67	2.71
Cassava	@	14.00	5.44	2.57
Lettuce	Basket ,3@	78.33	16.70	4.69
Pimenton	Bag, 20x12	74.77	21.76	3.44
Tomato (Pera)	Box, 18 kg	64.44	7.63	8.45
Tomato (Manz)	Box, 20 kg	71.39	11.95	5.97
Peas	@	33.09	9.31	3.55
Cabbage	Bag, 50-60	70.00	27.73	2.52
Onion	15@	443.86	80.06	5.54
Mandarin	100 pieces	57.50	12.00	4.79
Pineapple (Large)	100 pieces	280.00	200.00	1.4
Watermelon	100 pieces	731.54	458.82	1.59
Peach (Samaipata)	@	56.67	45.00	1.25
Apple (Argentine)	Box, 198 pieces	160.00	92.50	1.73
Apple (Chile)	Box, 200 pieces	136.00	83.81	1.62

Source: Numeros de Nuestra Tierra, 1998, CAO; Santa Cruz – Bolivia

Remarks: @ means arroba. (11.5 kg)

Table A.2.2-30 PRICE FLUCTUATION OF POTATO AND TOMATO IN COCHABAMBA MARKET

	(Unit: Bs./kg)			
	Potato		Tomato	
	1997	1998	1997	1998
Jan.	1.80-2.50	1.50-2.30	1.00-2.50	1.50-2.50
Feb.	1.50-1.80	2.40-3.00	1.50-2.00	1.50-2.00
Mar.	1.80-2.00	2.50-3.50	1.50-3.00	1.50-2.50
Apr.	1.40-2.00	2.50-3.50	2.50-3.00	2.00-2.50
May	1.50-2.00	2.00-2.50	1.50-2.50	1.50-3.50
June	1.80-2.00	2.00-2.50	1.50-2.50	1.50-2.50
July	1.60-1.80	2.00-2.50	1.30-2.00	1.50-3.50
Aug.	1.50-1.80	2.00-2.50	1.30-2.00	1.00-2.00
Sep.	1.00-1.50	2.00-2.50	1.50-2.00	1.00-2.50
Oct.	1.30-2.00		2.00-3.50	1.50-2.00
Nov.	1.30-2.00		1.50-2.50	1.50-2.00
Dec.	1.20		2.50-3.00	
Max/Min	3.5/1.2=2.92	3.5/1.5=2.33	3.5/1.0=3.5	3.5/1.0=3.5

Source: Municipal Government, Cochabamba

Table A.2.2-31 WHOLESALE PRICE FLUCTUATION OF FRUIT AND VEGETABLE IN LA PAZ
(From January, 1997 to April, 1998)

Commodity	Unit	Max. price (Bs.)	Min. price (Bs.)	Max./Min
Potato	@	23.34	12.77	1.83
Cassava	@	11.32	8.56	1.32
Lettuce	100 pieces	83.00	37.54	2.21
Tomato	Box, 40-45 lbs	41.25	20.00	2.06
Cabbage	100 pieces	107.08	37.67	2.84
Onion	100 pieces	27.55	10.38	2.65
Carrot	@	18.00	7.25	2.48
Naranja	100 pieces	51.75	9.50	5.45
Pineapple	100 pieces	118.13	82.50	1.43
Apple (imported)	Box, 75 - 100 pieces	113.60	87.80	1.29
Watermelon	QQ	55.63	37.50	1.48

Remarks: @ means arroba (11.5 kg) and QQ means quintal (46.5 kg)

Source: Numeros de Nuestra Tierra, 1998, CAO; Santa Cruz - Bolivia

Table A.2.2-32

FARMGATE PRICE OF TOMATO IN VALLEY AREAS

No.	Cultivated area (Ha)	Harvest (Kg)	Selling price (Bs/kg)	
1	0.75	9,900	0.7	W (F)
2	2	28,000	1.5	W (M)
3	1	32,200	0.43	W (F)
4	0.5	9,200	0.56	T
5	0.5	7,700	0.7	W (F)
6	0.5	18,000	1.2	W (M)
7	0.5	17,600	0.6	W (M)
8	0.25	23,000	0.78	W (M)
9	5	165,000	0.6	W (F)
10	0.5	10,000	0.75	W (F)
11	0.5	12,000	1.0	W (M)
12	0.75	12,100	0.5	W (M)
13	1	18,400	0.43	W (M)
14	0.5	17,000	1.93	R (M)
15	1	26,400	0.6	W (F)
16	2	24,000	0.5	W (M)
17	1	23,000	0.434	W (F)
18	1	32,400	0.388	W (M)
19	1	20,000	1.0	W (M)
20	2	22,000	0.87	W (F)
21	1	17,600	0.7	W (M)
22	0.25	6,900	0.87	R (M)
23	2	41,000	0.7	W (M)
24	0.5	3,000	1.0	W (F)
25	1.5	32,000	0.75	W (F)
26	1	23,000	0.87	W (F)
27	2	17,600	2.2	W (M)
28	1	16,000	0.5	W (F)
29	0.5	6,000	1.25	W (M)
30	2	40,000	0.5	W (F)
31	1	20,000	0.5	W (F)
32	2	40,000	0.5	W (F)
33	0.5	10,000	0.75	W (M)
34	0.5	10,000	0.75	W (M)
35	0.5	7,000	1.0	W (M)
36	1	26,400	0.5	W (M)
37	1	34,500	0.52	W (M)
38	1.5	30,000	0.5	W (F)
39	0.75	15,000	0.5	W (F)
40	0.5	10,350	0.56	W (M)
41	1	20,000	0.8	W (M)
42	0.5	13,200	0.6	W (M)
43	1	16,500	0.6	W (M)
44	0.25	4,000	1.0	W (M)
45	0.5	4,000	0.75	W (M)
46	0.5	4,000	1.0	W (M)
47	0.5	10,000	0.85	W (M)
48	0.5	15,400	0.6	W (M)
49	0.25	4,400	0.9	W (M)
50	1	28,000	0.6	W (M)
Total	46.25	1,029,750	38.592	
Average	0.925	20,595	0.77	

Remarks: W (F); Selling to wholesaler at field.
W (M); Selling to wholesaler at market.
T; Selling to transporter at field.
R (M); Selling to retailer at market.

Source: JICA Study Team, Aug., 1998.

Table A.2.2-33 MONTHLY CHANGE OF PRICE FOR TOMATO

(Unit: Bs./kg)

	Jan. 97	Feb. 97	Mar. 97	Apr. 97	May. 97	June. 97	July. 97	Aug. 97	Sep. 97	Oct. 97	Nov. 97	Dec. 97	Jan. 98	Feb. 98	Mar. 98	Apr. 98	May. 98	June. 98	July. 98	
Production cost	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Producers price	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Abasto	2.09	2.0	2.46	2.72	1.5	1.75	2.0	3.19	2.75	2.31	2.37	2.0	1.75	1.0	1.25	1.43	0.88	1.13	1.25	
Los pozos	1.95	2.12	2.07	2.77	1.5	2.3	3.04	4.08	3.3	2.51	2.12	2.12	2.13	1.3	2.0	2.0	2.5	2.0	2.0	
Ramada	2.47	2.35	3.31	3.26	2.5	2.0	3.14	3.81	3.3	2.89	2.25	2.2	2.0	1.75	1.63	2.15	2.0	1.5	1.5	

Source: Production cost; Camara Agropecuario del Oriente, 1997

Producers price; JICA Study Team, 1998

Prices in Abasto Market, Los Pozos and Ramada; Data provided by Santa Cruz Municipal Government

Table A.2.2-34 NUMBER OF TRUCK ENTERING TO ABASTO BY HOUR

Hour	August 1998 1 st phase study	November 1998 2 nd phase study
0 to 6	145 (37 %)	172 (45 %)
6 to 12	64 (17 %)	63 (17 %)
12 to 18	124 (31 %)	112 (30 %)
18 to 24	61 (15 %)	31 (8 %)
Total	394 (100%)	378 (100%)

Remarks: The data of August 1998 is the number of trucks for successive 7 days. The data of November 1998 is for 2 days and recalculated for 7days equivalent for the convenience of comparison.

Source: JICA Study Team, August and November 1998

Table A.2.2-35 NUMBER OF TRUCKS ENTERING BY ORIGIN TO ABASTO BY HOUR

Hour	0 to 6	6 to 12	12 to 18	18 to 24	Total
Valley	16	8	8	3	35 (32 %)
Low land	5	3	4	3	15 (14 %)
Outside SC	17	7	16	2	42 (39 %)
Import	11	0	3	2	16 (15 %)
Total	49(45 %)	18(17 %)	31(29 %)	10(9 %)	108 (100%)

Source: JICA Study Team, November 1998

Table A.2.2-36 CAPACITY OF TRUCK ENTERING TO ABASTO FROM MIDNIGHT TO 6AM. BY AREA

	Less than 5 tons	5 to 10 tons	10 to 20 tons	20 to 30 tons	Total
Valley	10	3	2	0	15 (31 %)
Low land	1	2	2	0	5 (10 %)
Outside SC	4	3	4	4	15 (30 %)
Import	1	2	3	8	14 (29 %)
Total	16 (33 %)	10 (20 %)	11 (22 %)	12 (25 %)	49 (100%)

Source: JICA Study Team, November 1998

Table A.2.2-37 TRANSPORTATION COST FROM PRODUCTION AREA IN THE VALLEY

	Samaipata	Mairana	Los Negros	San Isidro	Comarapa	Saipina	Valle Grande
Distance	120	137	171	240	245	270	250
From SC (km)							
Potato	86 - 105	108	129	129	129	140	150
(Bs./ton)							
Tomato	160	125	129	150	175	225	175
(Bs./ton)							
Vegetable	-	108 - 217	129	130 - 272	129	196 - 391	152
(Bs./ton)							
Fuel		5 ton - 60	5 ton - 80				
Consumption (l)		10 ton - 80					

Remarks: Maintenance cost required Bs.2,000 to 5,000/year depend on the distance to Santa Cruz.

Source: JICA Study Team, December 1998

Table A.2.2-38 TRANSPORTATION COST FOR LONG DISTANCE

	Distance (km)	Transportation cost
Yacuiba - Santa Cruz	564	Bs.140/ton
Yacuiba - Cochabamba	1,026	Bs.323/ton
Cochabamba - Santa Cruz	462	Bs.108/ton

Source: JICA Study Team, November 1998

Table A.2.2-39 WHOLESALE PRICE IN MAJOR CITY OF BOLIVIA

	Santa Cruz	Orulo	Cochabamba	Tarija	La Paz	Potosi
GDP (US\$)	1,043	951	824	764	743	436
Population	912,781	234,260	553,595	217,038	914,051	258,700
Potato (Bs./arroba)	21.0 - 24.0	18.0	19.9 - 20.0	11.9 - 15.4	19.4 - 22.8	20.0 - 25.0
Tomato (Bs./caja)	35.0 - 50.0	43.5 - 50.5	40.0	30.0 - 32.8	33.0 - 39.0	40.0
Citrus (Bs./100 pieces)	20.0 - 24.0	20.0	24.0 - 30.0	19.6 - 22.5	19.0 - 19.5	24.0 - 30.0

Source: GDP per capita; INE data on 1995
 Population; INE estimation for 1997
 Price; Camera Agropecuario del Oriente, May - June, 1998

Table A.2.2-40 PRODUCTION QUANTITY AND PRODUCTIVITY OF POTATO AND TOMATO IN MERCOSUR AND PACT ANDEAN COUNTRIES

	Potato Production Q'ty (1,000 tons)	Potato Productivity (Ton/ha)	Tomato Production Q'ty (1,000 tons)	Tomato Productivity (Ton/ha)
Argentina	2,000	20.0	740	30.8
Bolivia	725	5.6	46	10.2
Brazil	2,699	14.3	2,639	43.5
Chile	828	13.8	1,370	63.0
Columbia	2,594	16.4	300	23.4
Paraguay	2	6.1	43	37.0
Peru	2,265	9.8	214	32.0
USA	22,549	39.0	11,700	60.7

Source: FAO Production Yearbook 1996 (Vol.50)

Table A.2.2-41 THE PRICE OF FRUIT & VEGETABLE IN CENTRAL MARKET, BUENOS AIRES, ARGENTINE IN 1998

Unit: Upper column, Pesos/kg; Lower column, Bs./kg equivalent

	POTATO	TOMATO	ONION	CARROT	BANANA	CITRUS	PINE-APPLE	PEACH
Jan.	0.12 (0.67)	0.36 (2.02)	0.18 (1.01)	0.16 (0.90)	0.44 (2.46)	0.24 (1.34)	0.71 (3.98)	0.53 (2.97)
Feb.	0.11 (0.62)	0.31 (1.74)	0.21 (1.18)	0.13 (0.73)	0.57 (3.19)	0.33 (1.85)		0.76 (4.26)
Mar.	0.1 (0.56)	0.34 (1.90)	0.20 (1.12)	0.15 (0.84)	0.45 (2.52)	0.44 (2.46)		0.94 (5.26)
Apr.	0.15 (0.84)	0.36 (2.02)	0.15 (0.84)	0.24 (1.34)	0.36 (2.02)	0.30 (1.68)	0.96 (5.38)	0.86 (4.82)
May	0.14 (0.78)	0.41 (2.30)	0.15 (0.84)	0.15 (0.84)	0.43 (2.41)	0.23 (1.29)	0.94 (5.26)	
June	0.11 (0.62)	0.39 (2.18)	0.13 (0.73)	0.13 (0.73)	0.47 (2.63)	0.21 (1.18)	0.90 (5.04)	
July	0.1 (0.56)	0.52 (2.91)	0.14 (0.78)	0.13 (0.73)	0.64 (3.58)	0.27 (1.51)		
Aug.	0.09 (0.50)	0.84 (4.70)	0.13 (0.73)	0.12 (0.56)	0.55 (3.08)	0.25 (1.40)	0.40 (2.24)	5.30 (29.68)
Sep.	0.08 (0.45)	0.75 (4.20)	0.23 (1.29)	0.12 (0.56)	0.38 (2.13)	0.24 (1.34)	0.83 (4.65)	5.16 (28.90)

Remark: 1 Peso = US\$ 1, US\$ 1 = Bs. 5.6

Source: SIAP (Mercado Central de Buenos Aires)

Table A.2.2-42 WHOLESALE PRICE OF FRUIT & VEGETABLE IN BRAZIL

Commodity	Weight (kg)	Price (US\$)	Equivalent Bs./kg
Potato	50	7.08	0.79
Tomato	24	7.24	1.69
Onion	20	11.33	3.17
Carrot	25	5.44	1.22
Banana	18	8.42	2.62
Citrus	25	7.02	1.57
Pineapple	100 unit	69.12	3.86/unit
Peach	14 pieces	2.32	0.93/piece

Source: CEAGESP, Private communication (December 2, 1998)

Table A.2.2-43 LIST OF PROHIBITED PESTICIDES AND USAGE RESTRICTED PESTICIDES

Commercial Name	Class	Active Ingredient
Agallol	Seed sterilization	Mercury chloride
Aldrin	Insecticide	
Arosan	Seed sterilization	Mercury chloride
Clordano	Insecticide	
Curasemillas velsicol	Sterilization	
DDD	Insecticide	TDE
DDT	Insecticide	
Dieldrin	Insecticide	
Gammexane 2 6 DF	Insecticide	BHC
Galecron 50% CE	Insecticide	
Fundal 800	Insecticide	Lexone
Lexone	Insecticide	
Lindano	Insecticide	
Silvex 58	Herbicide	
U-46 Brushkiller LV 480	Herbicide	
U-46 Brushkiller HV 720	Herbicide	
U-46 Especial	Herbicide	
Mirinex	Insecticide	

Source: Dept. of Control and Prevention, Santa Cruz Department.

**Table A.2.2-44 OPTIMUM TEMPERATURE FOR COLD STORAGE
AND SHELF LIFE OF FRUIT**

Fruit	Preferable temperature	Shelf life
Apple	0 to 4°C	2 to 6 months
Grape	-1 to 0°C	1 to 4 months
Naranja	0 to 4°C	3 to 4 months
Peach	0°C	2 to 4 weeks
Mandarine	4 to 6°C	4 to 6 months
Watermelon	5 to 10°C	2 to 3 weeks
Banana Green	12 to 13°C	10 days
Yellow	13 to 16°C	20 days
Mango	7 to 12°C	3 to 6 weeks
Pineapple Green	10 to 13°C	2 to 4 weeks
Mature	7 to 8°C	2 to 4 weeks


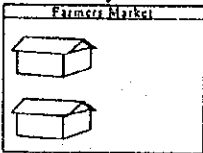
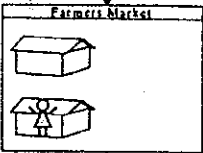
Source: Manual para el mejoramiento del manejo poscosecha de frutas y hortalizas,
Parte II FAO, 1989

**Table A.2.2-45 OPTIMUM TEMPERATURE FOR COLD STORAGE
AND SHELF LIFE OF VEGETABLE**

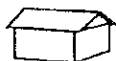
Vegetable	Preferable temperature	Shelf life
Carrot	0°C	5 to 6 months
Lettuce	0°C	5 to 7 days
Onion	0°C	1 to 3 weeks
Potato	4 to 6°C	4 to 8 months
Cucumber	9 to 12°C	1 to 2 weeks
Pimenton	10 to 13°C	1 to 3 weeks
Tomato Green	12 to 13°C	1 to 2 weeks
Mature	8 to 10°C	1 week

Source: Manual para el mejoramiento del manejo poscosecha de frutas y hortalizas,
Parte II FAO, 1989

Table A.2.3-1 HISTORY OF MANAGEMENT IN ABASTO MARKET BEFORE 1994 - 1/2

Year	Law/ Regulation Construction/ Rehabilitation	Abasto Market	Management Organization	
			Committee	Management Body
1978	Municipal Gov. decided the construction site of Abasto Market			
1981	According to S.D. 17921, MACA is authorized to acquire a loan from Bolivia's Central Bank for construction of Farmers Market. According to S.D. 18057, Municipal Gov. is in charge of implementation of construction of Farmers Market.			
1983	Inter-institutional agreement between MACA and Municipal Gov. on construction of Abasto Market was signed Two bldgs. were constructed by the fund of Argentina.			
1984	According to S.D. 20015,20427, buildings were handed over to FSUTCSC. According to S.D. 20136, Department Committee is in charge of management of Farmers' market.		Department Committee	<ul style="list-style-type: none"> • Municipal Gov. • FSUTCSC
1985	According to Law, Municipal Gov. is in charge of construction, administration and maintenance of Municipal Market.		Department Committee	<ul style="list-style-type: none"> • Municipal Gov. • FSUTCSC
1987	According to S.D., Department Committee is reorganized to CRAMA		CRAMA	<ul style="list-style-type: none"> • Municipal Gov. • FSUTCSC

Legend



Building

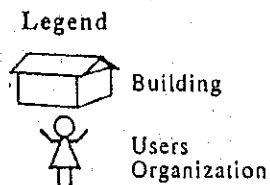


Users Organization

Source : Field Survey of Phase I of Feasibility Study for the Improvement of Agricultural Marketing System in Santa Cruz, Bolivia, 1998

Table A.2.3-1 HISTORY OF MANAGEMENT IN ABASTO MARKET BEFORE 1994 - 2/2

Year	Law/ Regulation Construction/ Rehabilitation	Abasto Market	Management Organization	
			Committee	Management Body
1990	Cooperativa 2 de Junio constructed bldg. by USUFRUCT system. Basic infrastructure was constructed by Emergency Social Fund, CORDECRUZ and Municipal Gov.		CRAMA	<ul style="list-style-type: none"> • Municipal Gov. • FSUTCSC • Cooperativa 2 de Junio
1994			CRAMA no longer function	<ul style="list-style-type: none"> • Municipal Gov. • FSUTCSC • ASPROA • Cooperativa 2 de Junio
1995	According to Decentralization Law, Central Gov. conferred the power to Prefecture to establish committee in place of CRAMA		Operation Management Committee (no legal status). This committee disappeared within this year.	<ul style="list-style-type: none"> • Municipal Gov. • FSUTCSC • ASPROA • Cooperativa 2 de Junio
1996	Municipal Gov. rehabilitated infrastructure		M/P Follow-up Committee (no legal status)	<ul style="list-style-type: none"> • Municipal Gov. • FSUTCSC • ASPROA • Cooperativa 2 de Junio
1997 1998	Cooperativa 2 de Junio expanded its building		Coordination and Follow-up Committee of M/P (no legal status)	<ul style="list-style-type: none"> • Municipal Gov. • ASPROA • 19 de Marzo • ASPROCA • ACMAPA • 24 de September AIPPA • ASPROCE • Cooperativa 2 de Junio



Source : Field Survey of Phase I of Feasibility Study for the Improvement of Agricultural Marketing System in Santa Cruz, Bolivia, 1998

Table A.2.3-2 CHANGE OF INSTITUTION, INFRASTRUCTURE AND FACILITIES IN ABASTO MARKET FROM 1994 TO 1998

Item	1994 (M/P Stage)		1998 (F/S Stage)	
	Farmers' Market	Municipal Market	Farmers' Market	Municipal Market
(1) Law/Regulation	According to S.D. of 1987, CRAMA is dictated as a management organization	According to law of 1985, Municipal Gov. is in charge of construction, administration and maintenance of municipal Market	After Decentralization Law of 1995. S.D. of 1987 CRAMA was made invalid. Prefectural Resolution is enough to establish organization such as CRAMA. In 1995, Municipal Ordinance of Santa Cruz authorized the expropriation of real estate for expansion of Abasto Market.	Municipal Gov. is in charge of construction, administration and maintenance.
(2) Management organization and management	CRAMA no longer functions. Abasto market was operated and managed by FSUTCSC, ASPROA and Municipal Gov.	Cooperativa 2 de Junio managed in cooperation with Municipal Gov.	FSUTCSC and ASPROA split into seven associations. The said 7 associations and Municipal Gov. manage and operate Abasto Market. Coordination and Follow-up Committee of M/P was established in 1997.	Cooperativa 2 de Junio managed in cooperation with Municipal Gov.
(3) Facilities/Infrastructure and O/M				
1) Extent of area	16,000 m ²	16,000 m ²	28,000 m ² Increased land area are utilised as parking area.	16,000 m ²
2) Cooperative Building	-	7,000 m ²	-	14,000 m ² Cooprative bldg. was expanded in 1995.
3) Temporary sheds	4 sheds	-	12 sheds	-
4) Infrastructure				
a. Pavement	Some areas were not paved	-	All areas have been paved	-
b. Parking area	-	-	About 50 trucks parking area within market decreased due to occupation of passage by increased merchants.	-
c. Cover of drain trench outside market	Drain trench was not covered. Sanitary condition was bad.	Drain trench was not covered. Sanitary condition was bad.	Drain trench has been covered. Sanitary condition is good.	Drain trench was not covered. Sanitary condition is good.
d. Garbage area	Garbage area was located within the market.	-	Garbage areas have been located to three points outside the market.	-

Remark: S.D.; Supreme Decree

Source: Field survey of Phase I of Feasibility Study for the Improvement of Agricultural Marketing system in Santa Cruz, Bolivia, 1998

Table A.2.3-3 LEGAL BASIS AND STATUS OF EXISTING MANAGEMENT SYSTEM IN ABASTO MARKET

Item	Draft Law/Regulation	Operation/Maintenance	
		1994	1998
<u>Organization</u>			
• Committee	O	O	X
<u>Management</u>			
• Kinds of commodities	O	X	X
• Qualification and registration of users	O	X	X
• Transaction system	<i>Aucion</i>	O	X
	<i>Direct negotiation/ Consignment</i>	O	O
	<i>Prohibition of transaction among wholesalers</i>	O	X
	<i>Cash Payment</i>	O	X
• Fee system	<i>Municipal GOV.</i>	O	X
	<i>Users organization</i>	X	O
• Operation days and hours	O	Δ	Δ
• Utilization of facilities	O	X	X
• Collection/Publication of marketing information	<i>Collection : Price</i>	O	Δ
	<i>: Volume</i>	O	Δ
	<i>Publication : Price</i>	O	X
	<i>: Volume</i>	O	X
• Monitoring of utilization of selling section	O	X	X
• Standard of product	O	X	X
• Prohibition/Penalties	O	X	X
<u>Operation</u>			
• Security control	O	O	O
• Price/weight control	O	Δ	Δ
• Control of entering, circulating and parking of vehicles	O	Δ	Δ
• Mediation of conflic	O	Δ	Δ
• Sanitary control	O	O	O
• Gabage collection	O	O	O

Remark: (1) Law/Regulation o : Exist x: Not Exist
(2) Operation/Maintenance o : Implemented Δ : Partially implement x : Not implemented

Source: (1) Law/Regulation - Law/Regulation on Wholesale Market in Japan, Brazil and Germany.
- Draft regulation prepared by CRAMA in 1987.
- Draft regulation prepared by Coordination Committee in 1998

(2) Field Survey of Phase I of Feasibility Study for the Improvement of Agricultural Marketing System in Santa Cruz, Bolivia, 1998

Table A.2.4-1 Outline of the Site Condition of Project Site Alternatives for New Wholesale Market

Items	City Block UV 189 in Santa Cruz	Site in La Guardia City
1 Land Owner	Private land	To be confirmed
2 Location	City block UV189, approx. 8 km south-west of city center	Approx. 13km south-west of Sant Cruz city center, along Route 4
3 Total Land Area	Approx. 60-70 ha	To be confirmed
4 Land Surface	Flat, existing facilities	To be confirmed
5 Infrastructure	E, W, T, no sewage	E, W, T
6 Surroundings	Schools, Petroleum company, gravel supply company, Residences and farm	To be confirmed

Table A.2.4-2 Evaluation of Project Site Alternatives for New Wholesale Market (Summarized Table)

Criteria	Ranking of each alternative site for the criteria	
	UV189 in St.Cruz	Site in La Guardia City
1 Position of wholesale market development in the framework of regional development plan (PDMs and Guidline of Metropolitan Development Plan)	-	+
2 Accessibility for products suppliers (Accessibility from main incoming route i.e. national road No. 4,7,9 and 6, railway to Brazil)	Equal	Equal
3 Accessibility for users of the wholesale market in consumption area (proximity to St. Cruz, accessibility to public traffic system for the city dwellers)	+	-
4 Management ability of facilities maintenance of City Government (financial ability, organization/human-resources, experience of similar projects)	+	-
5 Management ability of users' organization (financial/management ability concerned with dominant members)	+	-
6 Sustainability (unstability in coordination for relation between city government, operation organization, users and private developer / sustainability from city government's experience)	+	-
7 Site condition (condition of public utilities)	Equal	Equal
8 Land Acquisition etc. (difficulties of land acquisition, necessity of large scale land preparation, shortage of infrastructure)	-	+
9 Linkage with other project (influence of linkage with other private projects concerned with agri-products marketing)	Equal	Equal
10 Environmental Impact Assessment to the future conditions of Abasto Market / New Wholesale Market (social impact / environmental impact)	+	-
11 Project Evaluation (economic/financial reliabilities and income redistribution)	+	-
12 Effective Technology Transfer to the related persons	+	-

Remark :

The marks shown in this table (+, -, and Equal) have following meanings. If the score of one site is higher than the other's, this site gets "+". On the other hand, if the score of one site is lower than the other's, this site gets "-". And if the scores of 2 alternative sites are equal, 2 sites get "Equal".

Table A.2.4-3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (1/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site	
					UV189 in St.Cruz	Site in La Guardia City City
1 Position of wholesale market development	1.1 Positioning described in Santa Cruz City's Development Plan (PDM)	Exist		Not exist	1	1
		3		1		
	1.2 Positioning described in Santa Cruz Prefecture's Development Plan (PDM)	Exist		Not exist	1	1
		3		1		
	1.3 Positioning described in Santa Cruz Prefecture's Guideline of Metropolitan Development Plan	Exist		Not exist	1	3
		3		1		
	(Score sub-total)				3	5
	(Ranking of each alternative site for this criteria)				2	1

Table A.2.4-3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (2/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site	
					UV189 in St.Cruz	Site in La Guardia City City
2 Accessibility for products suppliers	2.1 Accessibility from Route No.4 as a main incoming route from Valley Area	Good	Medium	Not good	3	3
		3	2	1		
	2.2 Accessibility from Route No.7 & No.9 as a main incoming route from San Juan / Low land area	Good	Medium	Not good	2	2
		3	2	1		
	2.3 Accessibility from Route No.4 as a main incoming route from outside the Prefecture (Cochabamba - St. Cruz)	Good	Medium	Not good	3	3
		3	2	1		
	2.4 Accessibility from Route No.4 as a future main incoming route from Cotoca region	Good	Medium	Not good	1	1
		3	2	1		
	2.5 Accessibility from Route No. 9 & No. 6 as a main import/export route from Argentina/Paraguay	Good	Medium	Not good	3	3
		3	2	1		
	2.6 Accessibility to rail road network for Brazil	Good	Medium	Not good	2	2
		3	2	1		
	(Score sub-total)				14	14
	(Ranking of each alternative site for this criteria)				1	1

Table A.2.4-3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (3/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site	
					UV189 in St.Cruz	Site in La Guardia City City
3 Accessibility for users of the wholesale market in consumption area (dealers, retailers in St.Cruz)	3.1 Proximity to main consumption area (St.Cruz)	Good	Medium	Not good	2	1
		3	2	1		
	3.2 Accessibility from bus network	Good	Medium	Not good	2	1
		3	2	1		
	3.3 Accessibility for taxi user	Good	Medium	Not good	2	1
		3	2	1		
	(Score sub-total)				6	3
	(Ranking of each alternative site for this criteria)				1	2

Table A.2.4-3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (4/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site	
					UV189 in St.Cruz	Site in La Guardia City City
4 Management ability of facilities maintenance of City Government	4.1 Annual budget	Large	Medium	Small	3	1
		3	2	1		
	4.2 Total No. of personnel (divided by technical level) of organization	Large	Medium	Small	3	1
		3	2	1		
	4.3 Experience of similar project	Exist		Nil	3	1
		3		1		
	(Score sub-total)				9	3
	(Ranking of each alternative site for this criteria)				1	2

Table A.2.4.3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (5/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site		
					UV189 in St.Cruz	Site in La Guardia City City	
5 Management ability of users' organization	5.1	Coordination/organization ability	High 3	Medium 2	Low 1	3	2
	5.2	Financial ability	High 3	Medium 2	Low 1	3	2
	5.3	Management ability	High 3	Medium 2	Low 1	3	2
(Score sub-total)						9	6
(Ranking of each alternative site for this criteria)						1	2

Table A.2.4.3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (6/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site		
					UV189 in St.Cruz	Site in La Guardia City City	
6 Sustainability	6.1	Difficulties in coordination for relation between city government, users' organization, and users	Easy 3	Medium 2	Difficult 1	3	2
	6.2	Sustainability related to experience of maintenance institution	Large 3	Medium 2	Small 1	3	1
	(Score sub-total)						6
(Ranking of each alternative site for this criteria)						1	2

Table A.2.4.3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (7/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site		
					UV189 in St.Cruz	Site in La Guardia City City	
7 Site Condition	7.1	Electricity	Exist 3	Under planning 2	Not exist 1	3	3
	7.2	Possible water	Exist 3	Under planning 2	Not exist 1	3	3
	7.3	sewage	Exist 3	Under planning 2	Not exist 1	1	1
	7.4	Garbage collection service	Exist 3	Under planning 2	Not exist 1	3	3
	7.5	Communication network (telephone or optical fiber cable network)	Exist 3	Under planning 2	Not exist 1	3	3
(Score sub-total)						13	13
(Ranking of each alternative site for this criteria)						1	1

Table A.2.4.3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (8/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site		
					UV189 in St.Cruz	Site in La Guardia City City	
8 Land Acquisition etc.	8.1	Difficulties in land acquisition	Easy 3	Medium 2	Not easy 1	1	2
	8.2	Necessity of demolition, large scale land-civ. filling, bank protection, and etc. for land preparation	Not necessary 3	A little works required 2	Necessary 1	2	3
	8.3	Necessities of infrastructure preparation by management institute	Small 3	Medium 2	Large 1	2	2
(Score sub-total)						5	7
(Ranking of each alternative site for this criteria)						2	1

Table A.2.4.3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (9/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site			
					UV189 in St.Cruz	Site in La Guardia City City		
9 Linkage with other project	9.1	Linkage with other private project	Large 3	Medium 2	Small 1	3	3	
	(Score sub-total)						3	3
	(Ranking of each alternative site for this criteria)						1	1

Table A.2.4-3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (10/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site			
					UV189 in St.Cruz	Site in La Guardia City City		
10 Environmental Impact Assessment	10.1	Social Impact related to the New Wholesale Market (Large positive impact-Medium-Small positive impact)						
	(1)	To small scale farmers	Large 3	Medium 2	Small 1	2	3	
	(2)	To women engaged in small scale transportation in production areas	Large 3	Medium 2	Small 1	2	2	
	(3)	To large scale farmers	Large 3	Medium 2	Small 1	3	2	
	(4)	To Japanese-Bolivian farmers	Large 3	Medium 2	Small 1	3	2	
	(5)	To transporters in production areas	Large 3	Medium 2	Small 1	3	3	
	(6)	To intermediates in production areas	Large 3	Medium 2	Small 1	2	2	
	(7)	To dealers in consumption area	Large 3	Medium 2	Small 1	3	3	
	(8)	To import/export dealers in consumption area	Large 3	Medium 2	Small 1	2	2	
	(9)	To intermediates in consumption area	Large 3	Medium 2	Small 1	3	3	
	(10)	To retailers	Large 3	Medium 2	Small 1	3	3	
	(11)	To super-market	Large 3	Medium 2	Small 1	3	2	
(12)	To neighboring inhabitants	Large 3	Medium 2	Small 1	1	1		
	10.2	Social Impact related to the Abasto Market (Large positive impact-Medium-Small positive impact)						
(1)	To small scale farmers	Large 3	Medium 2	Small 1	3	3		
(2)	To women engaged in small scale transportation in production areas	Large 3	Medium 2	Small 1	3	3		
(3)	To large scale farmers	Large 3	Medium 2	Small 1	3	3		
(4)	To transporters in production areas	Large 3	Medium 2	Small 1	3	3		
(5)	To retailers	Large 3	Medium 2	Small 1	3	3		
	10.3	Environmental Impact in and around the New Wholesale Market (Small negative impact-Medium-Large negative impact)						
(1)	Noise pollution	Small 3	Medium 2	Large 1	1	1		
(2)	Air pollution	Small 3	Medium 2	Large 1	1	1		
(3)	Water pollution	Small 3	Medium 2	Large 1	2	2		
(4)	Soil pollution	Small 3	Medium 2	Large 1	3	3		
(5)	Garbage / Dust	Small 3	Medium 2	Large 1	2	2		
	10.4	Environmental Impact in and around the Abasto Market (Small negative impact-Medium-Large negative impact)						
(1)	Noise pollution	Small 3	Medium 2	Large 1	3	3		
(2)	Air pollution	Small 3	Medium 2	Large 1	3	3		
(3)	Water pollution	Small 3	Medium 2	Large 1	2	2		
(4)	Soil pollution	Small 3	Medium 2	Large 1	3	3		
(5)	Garbage / Dust	Small 3	Medium 2	Large 1	2	2		
		(Score sub-total)			67	65		
		(Ranking of each alternative site for this criteria)			1	2		

Table A.2.4-3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (11/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site	
					UV189 in St Cruz	Site in La Guardia City
11 Project Evaluation	11.1(1) Economic Reliability	Large 3	Medium 2	Small 1	3	2
	(2) Financial Reliability	Large 3	Medium 2	Small 1	2	3
	(3) Income Redistribution	Large 3	Medium 2	Small 1	3	2
	(Score sub-total)				8	7
	(Ranking of each alternative site for this criteria)				1	2

Table A.2.4-3 Criteria for Site Selection / Evaluation of Project Site Alternatives for New Wholesale Market in Santa Cruz (12/12)

Criteria	Sub-criteria	Scores for evaluation			Score of each alternative site	
					UV189 in St Cruz	Site in La Guardia City
12 Effective Technology Transfer	12.1 Effective Technology Transfer					
	(1) To small scale farmers	Effective 3	Medium 2	Not effective 1	1	2
	(2) To women engaged in small scale transportation in production areas	Effective 3	Medium 2	Not effective 1	1	1
	(3) To large scale farmers	Effective 3	Medium 2	Not effective 1	2	2
	(4) To Japanese-Bolivian farmers	Effective 3	Medium 2	Not effective 1	3	1
	(5) To transporters in production areas	Effective 3	Medium 2	Not effective 1	2	2
	(6) To intermediates in production areas	Effective 3	Medium 2	Not effective 1	2	2
	(7) To dealers in consumption area	Effective 3	Medium 2	Not effective 1	3	1
	(8) To import/export dealers in consumption area	Effective 3	Medium 2	Not effective 1	3	1
	(9) To intermediates in consumption area	Effective 3	Medium 2	Not effective 1	3	1
	(10) To retailers	Effective 3	Medium 2	Not effective 1	3	1
	(11) To super-market	Large 3	Medium 2	Small 1	3	1
(Score sub-total)				26	15	
(Ranking of each alternative site for this criteria)				1	2	

Table A.2.4-4 Possible Site for New Wholesale Market in UV189 and neighboring District

	Site A	Site B	Site C
1. Location	<ol style="list-style-type: none"> 1. This site is convenient to users because it's along directly to Route 4. 2. No room for future extension 3. In UV189 	<ol style="list-style-type: none"> 1. Located approx. 400m south-east from route 4 2. There is room for future extension. 3. In UV189 	<ol style="list-style-type: none"> 1. Located approx. 1.4 km from Route 4 and 500 m from Ring Road 8th. 2. Room for future extension is large 3. In ZAPU next to UV189
2. Infrastructure	Equipped with road and main line of potable water, electricity / telephone. (in the zone of non sewage)	<ol style="list-style-type: none"> 1. City Gov'nt has projected road from Route 4. It's necessary to prepare access road to Ring Road 8th. 2. Equipped with electric main line. 3. Not equipped with potable water main line. (in the zone of non sewage) 	<ol style="list-style-type: none"> 1. City Gov'nt has projected roads from Rout 4 and Ring Road 8th (projected road from Ring Road dose not touch with Site C directly). Budget and construction schedule are now under investigation. (*1). 2. Not equipped with potable water main line. (in the zone of non sewage) 3. Not equipped with electric main line (under investigation).
3. Social Impact etc.	<ol style="list-style-type: none"> 1. High tonnage truck flow to/from Site will disturb the traffic flow of future Route 4 (It's now under construction for hi-way). 2. Inflow of wasted water from new wholesale market to Route 4 will lessen the value of Route 4. 3. Predicted street venders will disturb the traffic flow on Route 4. 	<ol style="list-style-type: none"> 1. Temporal residences and chicken farm facilities exist in the site. Social problems from expropriation will supposedly occur. 	<ol style="list-style-type: none"> 1. Benefit of projected road from Route 4/Ring Road 8th will rise-up by new wholesale market. 2. No possibility of traffic jam and social problems
4. Land Price	Highest	Low	Lowest

Remark *1 : Budget and construction schedule of these 2 projected roads are now under investigation. But according to the explanation by Director of Public Work Section of Santa Cruz City, road pavement budget of 1999 dose not includes the budget for these 2 projected roads.

Table A.2.4-5 ESTIMATION OF POPULATION INCREASE

	1997	2000	2005	2010
Dept. Santa Cruz	1,651,951	1,813,029	2,052,492	2,396,778
Prov. A. Ibanez	1,009,379	1,145,268	1,393,396	1,654,917
City Santa Cruz	912,781	1,035,665	1,211,582	1,438,979

Table A.2.4-6 SUPPLY/DEMAND OF VEGETABLE AND FRUIT (2000)

(Unit: 1,000 tons)

	<i>Supply</i>			<i>Demand</i>			S/D balance
	Production	Inflow	Total	Consumption	Outflow	Total	
Valley	117	0	117	21	17	38	+79
Low land	362	0	362	210	80	290	+72
Import	-	13	13	-	-	-	+13
SC City	-	161	161	325	-	325	-164
Total	479	174	653	556	97	653	0

Table A.2.4-7 SUPPLY/DEMAND OF VEGETABLES AND FRUIT (2005)

(Unit: 1,000 tons)

	<i>Supply</i>			<i>Demand</i>			S/D Balance
	Production	Inflow	Total	Consumption	Outflow	Total	
Valley	127	0	127	21	22	43	+84
Low land	380	0	380	203	77	280	+100
Import	0	15	15	-	-	-	+15
SC City	0	181	181	380	-	380	-199
Total	507	196	703	604	99	703	0

Table A.2.4-8 SUPPLY/DEMAND OF VEGETABLE AND FRUIT (2010)

(Unit: 1,000 tons)

	<i>Supply</i>		<i>Demand</i>				S/D Balance
	Production	Inflow	Total	Consumption	Outflow	Total	
Valley	145	0	145	21	31	52	+93
Low land	418	0	418	213	86	299	+119
Import	0	17	17	-	-	-	+17
SC City	0	222	222	451	-	451	-229
Total	563	239	802	685	117	802	0

Table A.2.4-9 ORIGIN/DESTINATION OF VEGETABLE AND FRUIT (2000)

(Unit: 1,000 tons)

	<i>Valley</i>	<i>Low land</i>	<i>SC City</i>	<i>Sub-total</i>	<i>Outside SC</i>	<i>Export</i>	<i>Total</i>
Valley	21	0	79	100	17	0	117
Low land	0	210	72	282	80	0	362
SC City	0	0	0	0	0	0	0
Sub-total	21	210	151	382	97	0	479
Outside SC	0	0	161	161	-	0	174
Import	0	0	13	13	0	-	13
Total	21	210	325	569	97	0	666

Table A.2.4-10 ORIGIN/DESTINATION OF VEGETABLE AND FRUIT (2005)

(Unit: 1,000 tons)

	<i>Valley</i>	<i>Low land</i>	<i>SC City</i>	<i>Sub-total</i>	<i>Outside SC</i>	<i>Export</i>	<i>Total</i>
Valley	21	0	84	105	22	0	127
Low land	0	203	100	303	77	0	380
SC City	0	0	0	0	0	0	0
Sub-total	21	203	184	408	99	0	507
Outside SC	0	0	181	181	-	0	181
Import	0	0	15	15	0	-	15
Total	21	203	380	604	99	0	703

Table A.2.4-11 ORIGIN/DESTINATION OF VEGETABLE AND FRUIT (2010)

(Unit: 1,000 tons)

	<i>Valley</i>	<i>Low land</i>	<i>SC City</i>	<i>Sub-total</i>	<i>Outside SC</i>	<i>Export</i>	<i>Total</i>
Valley	21	0	93	114	31	0	145
Low land	0	213	119	332	86	0	418
SC City	0	0	0	0	0	0	0
Sub-total	21	213	212	446	117	0	563
Outside SC	0	0	222	222	-	0	222
Import	0	0	17	17	0	-	17
	21	213	451	685	117	0	802

Table A.2.4-12 ESTIMATION OF MARKETING VOLUME IN THE NEW WHOLESALE MARKET
 (Unit: 1,000 tons)

Year	Total marketing Volume (A)	Direct Marketing (B)	Through Wholesale Market (A) - (B)	New Wholesale Market	
				(61%)	(70%)
2000	325	32	293	178	205
2005	380	38	342	209	239
2010	451	45	406	248	284

Table A.2.4-13 MARKETING VOLUME OF FRUITS/VEGETABLES BY USING EXISTING SHARE OF WHOLESALE TRADE IN ABASTO MARKET BY MARKET BY ORIGIN BY PRODUCT IN 2005

Product	Wholesale Market										Abasto Market						Other Market						Grand Total
	V		L		O		I		total		V		L		O		I		total				
	9	33	15	70	7	6	0	0	13	83	0	0	0	0	0	0	0	0	0	0			
P	13	9	33	15	70	7	6	0	0	13	83	0	0	0	0	0	0	0	0	0	83		
T	24	5	27	0	56	6	11	0	0	17	73	0	0	0	0	0	0	0	0	0	73		
V	18	2	26	0	46	11	1	0	0	12	58	0	0	0	0	0	0	0	0	0	58		
B	0	26	3	0	29	0	16	0	0	16	45	0	13	0	0	0	0	0	13	0	58		
F	4	1	3	0	8	1	7	67	0	75	83	0	3	22	0	25	0	25	0	108			
Total	59	43	92	15	209	25	41	67	0	133	342	0	16	22	0	38	0	38	0	380			

Product	Unit: 10 ³ tons/year		
	Low land	Outside dept.	Import Total
P	20	15	33
T	30	16	27
V	29	3	26
B	0	55	3
F	5	11	92
Total	84	100	181

Remarks: (1) P: Potato, T: Tomato, V: Other Vegetables

B: Banana, F: Other Fruits

(2) V: Valley Area, L: Lowland, O: Outside Department S.C.

I: Import

(3) Existing share of wholesale trade in Abasto Market for total inflow volume to Santa Cruz excluding volume not through Abasto market and New Wholesale Market is 61%.

Source: Field Survey of Phase II of Feasibility Study for the Improvement of the Agricultural Marketing System in Santa Cruz, Bolivia, 1998

Table A.2.4-14 MARKETING VOLUME OF FRUITS/VEGETABLES BY USING EXISTING SHARE OF WHOLESALE TRADE IN ABASTO MARKET BY MARKET BY ORIGIN BY PRODUCT IN 2010

Product	Unit: 10 ³ tons/year																	
	Wholesale Market					Abasto Market					Other Market							
	V	L	O	I	total	V	L	O	I	total	V	L	O	I	total			
P	14	11	40	17	82	8	7	0	0	15	0	0	0	0	0	0	0	97
T	25	7	33	0	65	8	12	0	0	20	0	0	0	0	0	0	0	85
V	20	2	32	0	54	12	2	0	0	14	0	0	0	0	0	0	0	68
B	0	31	4	0	35	0	19	0	0	19	0	15	0	0	0	15	0	69
F	4	1	11	0	16	2	9	75	0	86	0	3	27	0	30	0	132	
Total	63	52	120	17	252	30	49	75	0	154	0	18	27	0	45	0	451	

Product	Valley	Unit: 10 ³ tons/year			
		Low land	Outside dept.	Import Total	
P	22	18	40	17	97
T	33	19	33	0	85
V	32	4	32	0	68
B	0	65	4	0	69
F	6	13	113	0	132
Total	93	119	222	17	451

Remarks: (1) P: Potato, T: Tomato, V: Other Vegetables

B: Banana, F: Other Fruits

(2) V: Valley Area, L: Lowland, O: Outside Department S.C.

I: Import

(3) Existing share of wholesale trade in Abasto Market for total inflow volume to Santa Cruz excluding volume not through Abasto market and New Wholesale Market is 61%.

Source: Field Survey of Phase II of Feasibility Study for the Improvement of the Agricultural Marketing System in Santa Cruz, Bolivia, 1998

Table A.2.4-15 MARKETING VOLUME OF FRUITS/VEGETABLES BY USING SHARE OF WHOLESALE TRADE AFTER INTRODUCTION OF NEW WHOLESALE MARKET BY MARKET BY ORIGIN BY PRODUCT IN 2005

Product	Unit: 10 ³ tons/year													
	Wholesale Market			Abasto Market			Other Market			Grand Total				
	V	L	O	V	L	O	V	L	O					
P	13	9	33	15	70	7	6	0	13	83	0	0	0	83
T	24	5	27	0	56	6	11	0	17	73	0	0	0	73
V	18	2	26	0	46	11	1	0	12	58	0	0	0	58
B	0	26	3	0	29	0	16	0	16	45	0	13	0	58
F	4	1	33	0	38	1	7	37	45	83	0	3	22	108
Total	59	43	122	15	239	25	41	37	103	342	0	16	22	380

Product	Unit: 10 ³ tons/year		
	Valley	Low land	Outside dept.
P	20	15	33
T	30	16	27
V	29	3	26
B	0	55	3
F	5	11	92
Total	84	100	181

Remarks: (1) P: Potato, T: Tomato, V: Other Vegetables

B: Banana, F: Other Fruits

(2) V: Valley Area, L: Lowland, O: Outside Department S.C.

I: Import

(3) Share of wholesale trade after introduction of New Wholesale Market for total inflow volume to Santa Cruz excluding volume not through Abasto market and New Wholesale Market is 70%.

Source: Field Survey of Phase II of Feasibility Study for the Improvement of the Agricultural Marketing System in Santa Cruz, Bolivia, 1998

Table A.2.4-16 MARKETING VOLUME OF FRUITS/VEGETABLES BY USING SHARE OF WHOLESALE TRADE AFTER INTRODUCTION OF NEW WHOLESALE MARKET BY MARKET BY ORIGIN BY PRODUCT IN 2010

Product	Wholesale Market						Abasto Market						Other Market						Grand Total				
	V		O		I total		V		L		O		I total		V		L			O		I total	
	14	11	40	17	82	8	7	0	15	97	0	0	0	0	0	0	0	0		0	0	0	0
P	25	7	33	0	65	8	12	0	20	85	0	0	0	0	0	0	0	0	0	0	0	0	85
T	20	2	32	0	54	12	2	0	14	68	0	0	0	0	0	0	0	0	0	0	0	0	68
V	0	31	4	0	35	0	19	0	19	54	0	15	0	0	0	0	0	0	0	0	0	0	69
B	4	1	43	0	48	2	9	43	54	102	0	3	27	0	30	0	0	0	0	0	0	0	132
F	63	52	152	17	284	30	49	43	122	406	0	18	27	0	45	0	0	0	0	0	0	0	451
Total																							

Product	Unit: 10 ³ tons/year		
	Low land	Outside dept.	Import Total
P	22	18	40
T	33	19	33
V	32	4	32
B	0	65	4
F	6	13	113
Total	93	119	222

Remarks: (1) P: Potato, T: Tomato, V: Other Vegetables

B: Banana, F: Other Fruits

(2) V: Valley Area, L: Lowland, O: Outside Department S.C.

I: Import

(3) Share of wholesale trade after introduction of New Wholesale Market for total inflow volume to Santa Cruz excluding volume not through Abasto market and New Wholesale Market is 70%.

Source: Field Survey of Phase II of Feasibility Study for the Improvement of the Agricultural Marketing System in Santa Cruz, Bolivia, 1998

Table A.2.4-17 ESTIMATION OF TRANSFER OF TRADERS WHO ARE OPERATING AS WHOLESALER IN ABASTO MARKET

Name of organization	Number of wholesalers through criteria						Traded volume by wholesalers qualified (tons/week)	
	Samples	Qualification Criteria (1)					Case 1 (2)	Case 2 (3)
		1	2	3	4	5		
1, Abasto Market								
Coperativa	46	24	24	23	23	19	520	450
19 Marzo	56	32	32	30	30	25	854	689
ASPROA	33	8	8	8	8	7	118	108
Non association	27	7	7	7	6	5	122	99
ACPAMA	5	1	1	1	1	1	14	14
ASOPROCA	23	13	13	8	8	2	256	134
AIPPA	14	11	11	9	9	6	132	84
<i>Subtotal</i>	<i>234</i>	<i>96</i>	<i>96</i>	<i>86</i>	<i>85</i>	<i>65</i>	<i>2016</i>	<i>1556</i>
2, Mutualista Market								
	30	3	3	3	3	2	42	22
<i>Total</i>	<i>264</i>	<i>99</i>	<i>99</i>	<i>89</i>	<i>88</i>	<i>67</i>	<i>2058</i>	<i>1578</i>
	(100%)			(33%)	(25%)			

Assumption:

(1) Qualification criteria

- 1) Traded volume by wholesalers more than 10 tons/week
- 2) Traded amount by wholesalers more than \$US 10,000
- 3) Activity as wholesaler: selling percentage for general consumers less than 40%
- 4) Mode of payment: cash
- 5) Willingness to move: yes

(2) Case 1: Traded volume by qualified wholesalers with criteria 1 to 4

(3) Case 2: Traded volume by qualified wholesalers with criteria 1 to 5

Source: Field Survey of Phase I of Feasibility Study for the Improvement of Agricultural Marketing System in Santa Cruz, Bolivia, 1998

Table A.2.4-18 REVENUE AND EXPENDITURE OF EXISTING WHOLESALERS (1/5)

POTATO			Unit: Bs
Item	Fixed Cost	Viable cost	Sum
1. Revenue (sales)	-	722,800	722,800
2. Expenditure (purchase)	-	676,000	676,000
Gross income	-	46,800	46,800
3. Other expenditure	4,454	16,016	20,470
(1) Labor cost	-	15,600	15,600
(2) Packing material cost	-	416	416
(3) Sales section rental fee	2,681	-	2,681
(4) O/M cost	1,473	-	1,473
(5) Tax	300	-	300
4. Profit before tax	-	-	26,630
5. Profit after tax	-	-	26,330

Remarks:

(1) Assumption

Product	: Potato
Handling volume	: 10 ton/week = 520 ton/year
Loss in wholesale stage	: 0%
Purchasing price	: Bs 15/@ = Bs 1.30/kg = Bs 1,300/ton x 520 ton/year = Bs 676,000/year
Sales price	: Bs 16/@ = Bs 1.39/kg = Bs 1,390/ton x 520 ton/year = Bs 722,800/year
Labor cost	: Bs 3/bag = Bs 0.03/kg = Bs 30/ton x 520 ton/year = Bs 15,600/year
Packing material cost	: Bs 2/bag (Life span: 25 times use) x 10 bags/ton = Bs 20/ton/25 times = Bs 0.8/ton x 520 ton/year = Bs 416/year
Sales section rental fee	: Bs 2,681/year
Operation/maintenance cost (O/M)	: Bs 1,473/year
Tax	: Bs 300/year

(2) Sales section rental fee

- Construction cost of existing cooperativa 2 Junio building: US\$ 1.5 x 10⁶
- Depreciation period and interest: 25 years, 14%/year
- Number of sales lot: 452 sections
- Depreciation cost per sales section: US\$ 1.5 x 10⁶ x 0.1455 = US\$ 218.25 x 10³/year = US\$ 483/year/section
= Bs 2,681/year/section

(3) O/M cost

- Salary/wages of cooperativa staff: Bs 14,400/year x 30 staff = Bs 432,000/year = Bs 956/year/section
- Utility cost of cooperativa building: Bs 16,000/month = Bs 192,000/year = Bs 425/year/section
- Maintenance cost: 0.5% of construction cost/year
US\$ 1.5 x 10⁶ x 0.005 = US\$ 7,500/year = Bs 41,625/year = Bs 92/year/section
- Total O/M cost = Bs 1,473/year/section

(4) Tax: simplified tax. RTS standard setting for uncalculated sales profit

Table A.2.4-18 REVENUE AND EXPENDITURE OF EXISTING WHOLESALERS (2/5)

TOMATO			Unit: Bs
Item	Fixed Cost	Viable cost	Sum
1. Revenue (sales)	-	453,960	453,900
2. Expenditure (purchase)	-	390,000	390,000
Gross income	-	63,960	63,960
3. Other expenditure	7,135	9,620	16,755
(1) Labor cost	-	7,800	7,800
(2) Packing material cost	-	1,820	1,820
(3) Sales section rental fee	5,362	-	5,362
(4) O/M cost	1,473	-	1,473
(5) Tax	300	-	300
4. Profit before tax	-	-	47,505
5. Profit after tax	-	-	47,205

Remarks:

(1) Assumption

- Product : Tomato
- Handling volume : 10 ton/week = 520 ton/year
- Loss in wholesale stage : 3%
- Purchasing price : Bs 15/box = Bs 0.75/kg = Bs 750/ton x 520 ton/year
= Bs 390,000/year
- Sales price : Bs 18/box = Bs 0.90/kg = Bs 900/ton x 520 ton/year x 0.97
= Bs 453,960/year
- Labor cost : Bs 3/10 box = Bs 0.015/kg = Bs 15/ton x 520 ton/year
= Bs 7,800/year
- Packing material cost : Bs 3.5/box (Life span: 50 times use) x 50 box/ton
= Bs 175/ton/50 times = Bs 3.5/ton x 520 ton/year = Bs 1,820/year
- Sales section rental fee : Bs 2,681/year
- Operation/maintenance cost (O/M) : Bs 1,473/year
- Tax : Bs 300/year

(2) Sales section rental fee

- Construction cost of existing cooperativa 2 Junio building: US\$ 1.5 x 10⁶
- Depreciation period and interest: 25 years, 14%/year
- Number of sales lot: 452 sections
- Depreciation cost per sales section: US\$1.5 x 10⁶ x 0.1455 = US\$ 218.25 x 10³/year
= US\$483/year/section = Bs 2,681/year/section

(3) O/M cost

- Salary/wages of cooperativa staff: Bs 14,400/year x 30 staff = Bs 432,000/year = Bs 956/year/section
- Utility cost of cooperativa building: Bs 16,000/month = Bs 192,000/year = Bs 425/year/section
- Maintenance cost: 0.5% of construction cost/year
US\$ 1.5 x 10⁶ x 0.005 = US\$ 7,500/year = Bs 41,625/year = Bs 92/year/section
- Total O/M cost = Bs 1,473/year/section

(4) Tax: simplified tax. RTS standard setting for uncalculated sales profit

Table A.2.4-18 REVENUE AND EXPENDITURE OF EXISTING WHOLESALERS (3/5)

ONION				Unit: Bs
Item	Fixed Cost	Viable cost	Sum	
1. Revenue (sales)	-	270,400	270,400	
2. Expenditure (purchase)	-	202,800	202,800	
Gross income	-	67,600	67,600	
3. Other expenditure	4,454	16,016	20,470	
(1) Labor cost	-	15,600	15,600	
(2) Packing material cost	-	416	416	
(3) Sales section rental fee	2,681	-	2,681	
(4) O/M cost	1,473	-	1,473	
(5) Tax	300	-	300	
4. Profit before tax	-	-	47,430	
5. Profit after tax	-	-	47,130	

Remarks:

(1) Assumption

- Product : Onion
- Handling volume : 10 ton/week = 520 ton/year
- Loss in wholesale stage : 0%
- Purchasing price : Bs 4.5/@ = Bs 0.39/kg = Bs 390/ton x 520 ton/year = Bs 202,800/year
- Sales price : Bs 6.0/@ = Bs 0.52/kg = Bs 520/ton x 520 ton/year = Bs 270,400/year
- Labor cost : Bs 3/bag = Bs 0.03/kg = Bs 30/ton x 520 ton/year = Bs 15,600/year
- Packing material cost : Bs 2/bag (Life span: 25 times use) x 10 bags/ton = Bs 20/ton/25 times = Bs 0.8/ton x 520 ton/year = Bs 416/year
- Sales section rental fee : Bs 2,681/year
- Operation/maintenance cost (O/M) : Bs 1,473/year
- Tax : Bs 300/year

(2) Sales section rental fee

- Construction cost of existing cooperativa 2 Junio building: US\$ 1.5 x 10⁶
- Depreciation period and interest: 25 years, 14%/year
- Number of sales lot: 452 sections
- Depreciation cost per sales section: US\$1.5 x 10⁶ x 0.1455 = US\$ 218.25 x 10³/year = US\$483/year/section = Bs 2,681/year/section

(3) O/M cost

- Salary/wages of cooperativa staff: Bs 14,400/year x 30 staff = Bs 432,000/year = Bs 956/year/section
- Utility cost of cooperativa building: Bs 16,000/month = Bs 192,000/year = Bs 425/year/section
- Maintenance cost: 0.5% of construction cost/year
US\$ 1.5 x 10⁶ x 0.005 = US\$ 7,500/year = Bs 41,625/year = Bs 92/year/section
- Total O/M cost = Bs 1,473/year/section

(4) Tax: simplified tax. RTS standard setting for uncalculated sales profit

Table A.2.4-18 REVENUE AND EXPENDITURE OF EXISTING WHOLESALERS (4/5)

BANANA				Unit: Bs
Item	Fixed Cost	Viable cost	Sum	
1. Revenue (sales)	-	166,400	166,400	
2. Expenditure (purchase)	-	143,000	143,000	
Gross income	-	23,400	23,400	
3. Other expenditure	4,454	2,600	7,054	
(1) Labor cost	-	2,600	2,600	
(2) Packing material cost	-	-	0	
(3) Sales section rental fee	2,681	-	2,681	
(4) O/M cost	1,473	-	1,473	
(5) Tax	300	-	300	
4. Profit before tax	-	-	16,646	
5. Profit after tax	-	-	16,346	

Remarks:

(1) Assumption

- Product : Banana (Platano)
- Handling volume : 10 ton/week = 520 ton/year
- Loss in wholesale stage : 25%
- Purchasing price : Bs 5.5/racimo (20kg) = Bs 275/ton x 520 ton/year = Bs 143,000
- Sales price : Bs 8/racimo (20kg) = Bs 400/ton x 520 ton/year x 0.8 = Bs 166,400
- Labor cost : Bs 0.1/racimo = Bs 5/ton x 520 ton/year = Bs 2,600/year
- Packing material cost : 0
- Sales section rental fee : Bs 2,681/year
- Operation/maintenance cost (O/M) : Bs 1,473/year
- Tax : Bs 300/year

(2) Sales section rental fee

- Construction cost of existing cooperativa 2 Junio building: US\$ 1.5 x 10⁶
- Depreciation period and interest: 25 years, 14%/year
- Number of sales lot: 452 sections
- Depreciation cost per sales section: US\$1.5 x 10⁶ x 0.1455 = US\$ 218.25 x 10³/year = US\$483/year/section = Bs 2,681/year/section

(3) O/M cost

- Salary/wages of cooperativa staff: Bs 14,400/year x 30 staff = Bs 432,000/year = Bs 956/year/section
- Utility cost of cooperativa building: Bs 16,000/month = Bs 192,000/year = Bs 425/year/section
- Maintenance cost: 0.5% of construction cost/year
US\$ 1.5 x 10⁶ x 0.005 = US\$ 7,500/year = Bs 41,625/year = Bs 92/year/section
- Total O/M cost = Bs 1,473/year/section

(4) Tax: simplified tax. RTS standard setting for uncalculated sales profit

Table A.2.4-18 REVENUE AND EXPENDITURE OF EXISTING WHOLESALERS (5/5)

CITRUS FRUITES			Unit: Bs
Item	Fixed Cost	Viable cost	Sum
1. Revenue (sales)	-	389,880	389,880
2. Expenditure (purchase)	-	376,200	376,200
Gross income	-	13,680	13,680
3. Other expenditure	4,454	5,970	10,424
(1) Labor cost	-	2,550	2,550
(2) Packing material cost	-	3,420	3,420
(3) Sales section rental fee	2,681	-	2,681
(4) O/M cost	1,473	-	1,473
(5) Tax	300	-	300
4. Profit before tax	-	-	3,556
5. Profit after tax	-	-	3,256

Remarks:

(1) Assumption

- Product : Citrus Fruit (Naranja), Seasonal fruit harvest 4 month/year
- Handling volume : 10 ton/week = 171 ton/year
- Loss in wholesale stage : 5%
- Purchasing price : Bs 22/100 unidad = Bs 22/10kg = Bs 2,200/ton x 171 ton/year
= Bs 376,200/year
- Sales price : Bs 24/100 unidad = Bs 24/10kg = Bs 2,400/ton x 171 ton x 0.95
= Bs 389,880/year
- Labor cost : Bs 1.5/10 box (10kg) = Bs 0.015/kg = Bs 15/ton x 170 = Bs 2,550/year
- Packing material cost : Bs 5/box (Life span 25 times use) x 100 box/ton = Bs 500/ton/25 times
= Bs 20/ton x 171 ton/year = Bs 3,420/year
- Sales section rental fee : Bs 2,681/year
- Operation/maintenance cost (O/M) : Bs 1,473/year
- Tax : Bs 300/year

(2) Sales section rental fee

- Construction cost of existing cooperativa 2 Junio building: US\$ 1.5 x 10⁶
- Depreciation period and interest: 25 years, 14%/year
- Number of sales lot: 452 sections
- Depreciation cost per sales section: US\$1.5 x 10⁶ x 0.1455 = US\$ 218.25 x 10³/year = US\$483/year/section
= Bs 2,681/year/section

(3) O/M cost

- Salary/wages of cooperativa staff: Bs 14,400/year x 30 staff = Bs 432,000/year = Bs 956/year/section
- Utility cost of cooperativa building: Bs 16,000/month = Bs 192,000/year = Bs 425/year/section
- Maintenance cost: 0.5% of construction cost/year
US\$ 1.5 x 10⁶ x 0.005 = US\$ 7,500/year = Bs 41,625/year = Bs 92/year/section
- Total O/M cost = Bs 1,473/year/section

(4) Tax: simplified tax. RTS standard setting for uncalculated sales profit

Table A.2.4-19 BREAK-EVEN POINT OF WHOLESALER

Unit: Bs

Item	Potato	Tomato	Onion	Banana	Citrus fruites
FC (Bs.)	4,454	7,135	4,454	4,454	4,454
VC (Bs.)	692,016	399,620	218,816	145,600	382,170
Vcu (Bs/kg)	1.331	0.769	0.421	0.28	2.23
Pu (Bs/kg)	1.390	0.900	0.520	0.40	2.40
Pu-Vcu (Bs/kg)	0.059	0.131	0.099	0.12	0.17
Qe (kg/year)	75,492	54,465	44,989	37,117	26,220
Qe (ton/week)	1.50	1.05	0.87	0.71	0.50

Remarks:

(1) Equation of Break Even Point

$$Q_e = FC / (P_u - V_{cu})$$

Q_e = Break-even point (kg)

FC: Fixed Cost (Bs.)

VC: Variable Cost (Bs.)

V_{cu} : Variable Cost per unit (Bs/kg)

P_u : Unit Price (Bs/kg)

Table A.2.4-20 PROPOSED RULES AND REGULATIONS OF WHOLESALE MARKET

Item of rules/regulations	Contents of the proposed rules/regulations
1. Organization	
Management Committee	Establishment of Management Committee composed of the representatives of wholesalers associations, associate members (retailer, transporter) and observers (Prefecture and Municipal Government).
Management Body	Establishment of Management Body under Management Committee. Management Body is in charge of operation/Maintenance under the supervisor of Municipal Government.
Users Organizations	Users organizations (wholesalers, retailers, transporters and producers associations) undertake operation/maintenance under the instruction of Management Body.
2. Management	
• Kind of commodities	Fruits and Vegetables and fresh product
• Qualification and registration of users	Qualification of the wholesalers: trading and financial capacity, experience of wholesale activity, management capability, wholesale activity
• Transaction system	<ul style="list-style-type: none"> • Direct negotiation and consignment • Daily payment by cash after delivery • Prohibition of transaction among wholesalers
• Tariff (fee)	<ul style="list-style-type: none"> • Rental charge of sales section • Entrance and parking charge of vehicles by capacity
• Operating days and hours	<ul style="list-style-type: none"> • Operating hours for wholesale market <ul style="list-style-type: none"> For wholesale activity: 7 a.m. ~ 1 p.m. For cleaning: 1 p.m. ~ 6 p.m. For entering and unloading of trucks: 6 p.m. ~ 7 a.m. • Operation hours for farmers market <ul style="list-style-type: none"> Hours: 2 p.m. ~ 5 p.m. Days: Two days per week
• Standard of product packing	Standard of packing: Sack, box basket and pack by product
• Collection/Publication of marketing information	Collection of informations on price and volume of fruits and vegetables everyday and publication by newspaper and radio.
• Monitoring of utilization of selling section	Monitoring on utilization efficiency of sales section. Loss of qualification by low efficiency of utilization through monitoring
• Utilization of facilities	Rule of utilization of facilities
• Prohibition/Penalties	
3. Operation/Maintenance	
• Security control	
• Price/weight control	
• Control of entering, circulating and parking of vehicle	
• Mediation of conflict	
• Sanitary control	
• Gabage collection	

Source: (1) Law/Regulation - Law/Regulation on Wholesale Market in Japan, Brazil and Germany - Regulation on Abasto Market in Bolivia.

(2) Field Survey of Phase I of Feasibility Study for the Improvement of Agricultural Marketing System in Santa Cruz, Bolivia, 1998

Table A.2.4-21 THE CHARACTERISTICS OF THE THREE OPTIONS FOR THE MANAGEMENT BODY OF THE NEW WHOLESALE MARKET

1. Contents of the Project	Option 1 Local Gov.	Option 2 Public Corporation	Option 3 Private Sector
1. Acquisition of the Land	S.C. Municipal Gov. acquires the land	S.C. Municipal Gov. acquires the land	S.C. Municipal Gov. acquires the land
2. Construction Stage (Fund & Construction)			
(1) Implementation Agency	S.C. Municipal Gov. is burdened the construction fund. Prefecture Gov. gives technical/financial assistance for Municipal Gov.	S.C. Prefecture, Municipal Gov. and User's jointly invest and establish the public corporation	Users establish the organization (wholesale company) and provide the fund. S.C. Prefecture and Municipal Gov. support the users organization to provide the fund because the market has a public function.
(2) Basic Infrastructure	S.C. Prefecture & Municipal Gov. construct by their own or public fund.	Public Corporation constructs by provided fund.	S.C. Prefecture & Municipal Gov. construct.
(3) Common Facilities	S.C. Prefecture & Municipal Gov. construct by their own or public fund.	Public Corporation constructs by provided fund.	Construction is done by Users Organization, Prefecture & Municipal Gov. Support provision of fund.
(4) Users Facilities	S.C. Municipal Gov. construct the facilities and rent/sell to users in order to recover the investment	Public Corporation construct the facilities and rent/sell to users.	Users constructs the facilities
(5) Common equipment (Fork Lift, Computers etc.)	S.C. Municipal Gov. Purchases the equipment and rent/sell to users in order to recover the investment.	Public Corporation purchases and rent/sell to users.	Wholesale Company purchases.
(6) Private Owned Equipment	Users are burdened.	Users are burdened.	Individual Users are burdened.
3. Management/Operation Stage (Fund and Operation)			
(1) Implementation Agency	S.C. Municipal Gov. has responsibility for Management/Operation. Actually Management Committee manages and operates the market under the supervision of Municipal Gov.	Public Corporation establishes the Board of Directors. The Board of Director has responsibility for Management/Operation.	Private Users Organization is established through the legal procedure. (Wholesale Company based upon cooperative law or commercial law).
(2) Management System	Management Committee monitors and inspects the operational conditions, and instructs to improve the management/operation if necessary	Board of Director monitors the operational conditions every year and audits the financial conditions.	Board of directors composed of members of company monitors and secures soundness of the business. (Profitability, fairness)

Source : Field survey of Feasibility study for the Improvement of Agricultural Marketing system in Santa Cruz, Bolivia, 1998.

Table A.2.4-22 EVALUATION OF THREE OPTIONS ON MANAGEMENT BODY OF THE NEW WHOLESALE MARKET

	Option 1 Municipal GOV.	Option 2 Public Corporation	Option 3 Private Sector
1. Construction			
(1) Provision of fund	Prefecture and Municipal GOV. can provide fund from their own capital or domestic and international sources.	Prefecture and Municipal GOV. can provide fund from their own capital or domestic and international sources.	Municipal GOV. Prepares the premise and infrastructure. Small scale traders have not their own capital and it's difficult to get loan from City bank.
(2) Repayment of fund	Municipal GOV. bears the depreciation cost. Users only pay the management/operation cost.	Users have pay depreciation cost and interest.	Users are burdened by depreciation cost and high interest.
(3) Supervision during construction	Municipal GOV. has competent engineers.	Public corporation have to employ engineer	Private sector have to employ engineer.
2. Management/Operation			
(1) Set-up management/operation system	Municipal GOV. has many project and experiences to set-up management system.	It is difficult to collect competent persons.	It takes a long time to unify many users organization and set-up one organization.
(2) Competent of management/operation	Initiative of management by public agencies is limited because it has possibility to be under the political influence.	There are possibilities to exclude small scale producers and traders except member of corporation.	Private sector has not competent to mediate conflict among users organizations
(3) Provision of operation fund	Municipal GOV. can collect rental fee of sections as a part of operational fund and cover the deficit in case of red figure.	There is a possibility to be unable to repay loan.	There is a possibility to be unable to repay loan.
(4) Securing talents	Municipal GOV. has many talents except commercial business.	Securing talent from private sector is difficult.	Securing talent from private sector is difficult.
(5) Efficiency of management/operation	Government officer has not competent on commercial business.	Public corporation can employ a talent on commercial business.	Efficiency of management/operation is low if there is no cooperations among users organizations.
(6) Securing equality of use	Conditions same as Abasto Market under CRAMA will be taken place in the New Wholesale Market. Wholesale function in the New Wholesale Market will be lost.	There is a possibility of monopolization by Board of Director.	It is possible to exclude the persons without member of users organizations.
(7) Promotion of marketing industries	It is difficult to promote private wholesalers organization.	There is a possibility that public corporation oppress private sectors.	Users can operate business unrestricted under unified organization.
3. Environmental control	It is no problem if rules/regulations on sanitary control and garbage treatment will be followed.	It is no problem if rules/regulations on sanitary control and garbage treatment will be followed under one organization.	It is no problem if rules/regulations on sanitary control and garbage treatment will be followed under one organization.

Source : Field survey of Feasibility study for the Improvement of Agricultural Marketing System in Santa Cruz, Bolivia, 1998.

Table A.2.4-23 MANAGEMENT AND OPERATION/MAINTENANCE SYSTEM OF THE NEW WHOLESALE MARKET

	Municipal Government	Management Committee and Body	Users Organization
(1) Management System			
a. Basic Infrastructure	O/M and rehabilitation by Municipal GOV.	Request rehabilitation for Municipal GOV.	Request rehabilitation for Management Committee.
b. Common Facilities	O/M and rehabilitation by Municipal GOV.	Request rehabilitation for Municipal GOV.	Request rehabilitation for Management Committee.
c. Users Facilities	O/M and rehabilitation by Municipal GOV.	Request rehabilitation for Municipal GOV.	Request rehabilitation for Management Committee.
d. Common Equipment	O/M and rehabilitation by Municipal GOV.	Request rehabilitation for Municipal GOV.	Request rehabilitation for Management Committee.
e. Private Owned Equipment	-	-	Users conduct O/M.
(2) Operation/Maintenance System			
1) Product traded (target product are fruits/vegetables. However, there is a possibility to trade other product.)	Supervision by Municipal GOV.	Decision by Management Committee.	Request for Management Committee.
2) Qualification and registration of users	Supervision by Municipal GOV.	Judgement of qualification.	-
3) Transaction System (Face to Face transaction, cash payment at the same day, Prohibition of trade between wholesalers)	Supervision by Municipal GOV.	Decision by Management Committee.	Operation and execution.
4) Tariff System	Supervision and collection tariff by Municipal GOV.	Decision by Management Committee.	Request of revision of tariff.
5) Operational Days and Times	Supervision by Municipal GOV.	Decision by Management Committee.	Request of revision by users organization.
6) Standard of Packing	Supervision by Municipal GOV.	Decision by Management Committee.	Request of revision by users organization.
7) Collection and Publishment of Marketing Informations	Supervision by Municipal GOV.	Collection and Publishment by Management Committee.	Obligation of provision of informations.
8) Monitoring the Utilization of Sales sections	Supervision by Municipal GOV.	Monitoring by Management Committee.	Obligation of efficient utilization.
9) Rules of Utilization of Facilities	Supervision by Municipal GOV.	Monitoring of implementation of rules.	Obligation of implementation of rules.
10)Penalty	Supervision by Municipal GOV.	Implementation	Prevention of Violation.
11)Security Control	Supervision by Municipal GOV.	Implementation	Obligation of Cooperation.
12)Price and Weight Control	Supervision by Municipal GOV.	Monitoring	Implementation
13)Control of Vehicles Circulating inside the Market	Supervision by Municipal GOV.	Implementation	Obligation of Cooperation.
14)Mediation of Dispute	Supervision by Municipal GOV.	Mediation of dispute between users organizations.	Mediation of dispute between members.
15)Sanitary Control and Garbage Disposal	Supervision by Municipal GOV.	Implementation	Obligation of Cooperation

Remarks: O/M; Operation/maintenance

Sources: Field survey of Feasibility Study for the Improvement of Agricultural Marketing system in Santa Cruz, Bolivia, 1998

Table A.2.5-1

ESTIMATED COST FOR TRAINING AND TECHNICAL ASSISTANCE

			Unit: US\$	
Item	Q'ty (persons)	Unit Cost	Amount	
1. Training in Bolivia and Technical Assistance by Bolivian expert				
(1) Workshop				
Materials for Group A	130	5	650	
Materials for Group B	110	3	330	
Materials for Group C	7,000	1	7,000	
Trainer fee for Groups A & B	10	30	300	
Sub-total			8,280	
(2) Study Tour in CBB				
Transportation Cost	30	120	3,600	
Daily Allowance	30 x 2 days	40	2,400	
Sub-total			6,000	
Total			14,280	
2. Training in foreign country and Technical Assistance by foreign expert				
(1) Trainer dispatch cost from MERCOSUR country				
Trainer dispatch cost				
Salary	Total 18 years x 12 months	5,000 / month	1,080,000	
Daily Allowance	Total 18 years x 12 months	5,000 / month	1,080,000	
Transportation	6	600	3,600	
Sub-total			2,163,600	
(2) Training in advanced country (MERCOSUR country)				
Transportation Cost	6	800	4,800	
Daily Allowance	6 x 30 days	100	18,000	
Sub-total			22,800	
(3) Study tour in MERCOSUR				
Transportation Cost	10	600	6,000	
Daily Allowance	10 x 3 days	100	3,000	
Sub-total			9,000	
Total			2,195,400	
Grand Total			2,209,680	



Table A.2.6-2 REVENUE AND EXPENDITURE OF WHOLESALERS IN NWM (1/5)

POTATO			Unit: Bs
Item	Fixed Cost	Variable cost	Sum
1. Revenue (sales)	-	3,258,160	3,258,160
2. Expenditure (purchase)	-	3,109,600	3,109,600
Gross income	-	148,560	148,560
3. Other expenditures	29,500	83,720	113,220
(1) Labor cost	-	71,760	71,760
(2) Packing material cost	-	11,960	11,960
(3) Sales section rental fee	29,200	-	29,200
(4) Tax	300	-	300
4. Profit before tax	-	-	35,640
5. Profit after tax	-	-	35,340

Remarks:

(1) Assumption

Product	: Potato
Handling volume	: 46 ton/week = 2,392 ton/year
Loss in wholesale stage	: 2%
Purchasing price	: Bs 15/@ = Bs 1.30/kg = Bs 1,300/ton x 2,392 ton/year = Bs 3,109,600/year
Sales price	: Bs 16/@ = Bs 1.39/kg = Bs 1,390/ton x 2,392 ton/year x 0.98 = Bs 3,258,160/year
Labor cost	: Bs 3/bag = Bs 0.03/kg = Bs 30/ton x 2,392 ton/year = Bs 71,760/year
Packing material cost	: Bs 2/bag (Life span: 4 times use) x 10 bags/ton = Bs 20/ton/4 times = Bs 5/ton x 2,392 ton/year = Bs 11,960/year
Sales section rental fee	: Bs 14,600/year x 2 sections = Bs 29,200 / year
Tax	: Bs 300/year

(2) Sales section rental fee : Bs 40 / day / section = Bs 14,600 / year / section

(3) Tax: simplified tax. RTS standard setting for uncalculated sales profit

Table A.2.6-2 REVENUE AND EXPENDITURE OF WHOLESALERS IN NWM (2/5)
TOMATO Unit: Bs

Item	Fixed Cost	Variable cost	Sum
1. Revenue (sales)	-	2,045,160	2,045,160
2. Expenditure (purchase)	-	1,794,000	1,794,000
Gross income	-	251,160	251,160
3. Other expenditures	43,500	55,734	99,234
(1) Labor cost	-	35,880	35,880
(2) Packing material cost	-	19,854	19,854
(3) Sales section rental fee	43,800	-	43,800
(4) Tax	300	-	300
4. Profit before tax	-	-	151,626
5. Profit after tax	-	-	151,926

Remarks:

(1) Assumption

- Product : Tomato
- Handling volume : 46 ton/week = 2,392 ton/year
- Loss in wholesale stage : 5%
- Purchasing price : Bs 15/box = Bs 0.75/kg = Bs 750/ton x 2,392 ton/year
= Bs 1,794,000/year
- Sales price : Bs 18/box = Bs 0.90/kg = Bs 900/ton x 2,392 ton/year x 0.95
= Bs 2,045,160/year
- Labor cost : Bs 3/10 box = Bs 0.015/kg = Bs 15/ton x 2,392 ton/year
= Bs 35,880/year
- Packing material cost : Bs 2.0/box (Life span: 12 times use) x 50 box/ton
= Bs 100/ton x 12 times = Bs 8.3/ton x 2,392 ton/year = Bs 19,854/year
- Sales section rental fee : Bs 14,600/year x 3 sections (Includ. empty box storage) = Bs 43,800/year
- Tax : Bs 300/year

(2) Sales section rental fee : Bs 40/day/section = Bs 14,600/year/section

(3) Tax: simplified tax. RTS standard setting for uncalculated sales profit

Table A.2.6-2 REVENUE AND EXPENDITURE OF WHOLESALERS IN NWM (3/5)
ONION Unit: Bs

Item	Fixed Cost	Variable cost	Sum
1. Revenue (sales)	-	1,218,963	1,218,963
2. Expenditure (purchase)	-	932,880	932,880
Gross income	-	286,083	286,083
3. Other expenditures	29,500	83,720	113,220
(1) Labor cost	-	71,760	71,760
(2) Packing material cost	-	11,960	11,960
(3) Sales section rental fee	29,200	-	29,200
(4) Tax	300	-	300
4. Profit before tax	-	-	173,163
5. Profit after tax	-	-	172,863

Remarks:

(1) Assumption

Product : Onion
 Handling volume : 46 ton/week = 2,392 ton/year
 Loss in wholesale stage : 2%
 Purchasing price : Bs 4.5/@ = Bs 0.39/kg = Bs 390/ton x 2,392 ton/year
 = Bs 932,880/year
 Sales price : Bs 6.0/@ = Bs 0.52/kg = Bs 520/ton x 2,392 ton/year x 0.98
 = Bs 1,218,963/year
 Labor cost : Bs 3/bag = Bs 0.03/kg = Bs 30/ton x 2,392 ton/year = Bs 71,760/year
 Packing material cost : Bs 2/bag (Life span: 4 times use) x 10 bags/ton = Bs 20/ton/4 times
 = Bs 5/ton x 2,392 ton/year = Bs 11,960/year
 Sales section rental fee : Bs 14,600/year x 2 sections = Bs 29,200 / year
 Tax : Bs 300/year

(2) Sales section rental fee : Bs 40 / day / section = Bs 14,600 / year / section

(3) Tax: simplified tax. RTS standard setting for uncalculated sales profit

Table A.2.6-2 REVENUE AND EXPENDITURE OF WHOLESALERS IN NWM (4/5)

BANANA		Unit: Bs	
Item	Fixed Cost	Variable cost	Sum
1. Revenue (sales)	-	717,600	717,600
2. Expenditure (purchase)	-	657,800	657,800
Gross income	-	59,800	59,800
3. Other expenditures	29,500	11,960	41,460
(1) Labor cost	-	11,960	11,960
(2) Packing material cost	-	0	0
(3) Sales section rental fee	29,200	-	29,200
(4) Tax	300	-	300
4. Profit before tax	-	-	18,640
5. Profit after tax	-	-	18,340

Remarks:

(1) Assumption

Product : Banana (Platano)
 Handling volume : 46 ton/week = 2,392 ton/year
 Loss in wholesale stage : 25%
 Purchasing price : Bs 5.5/racimo (20kg) = Bs 275/ton x 2,392 ton/year
 = Bs 657,800/year
 Sales price : Bs 8/racimo (20kg) = Bs 400/ton x 2,392 ton/year x 0.75
 = Bs 717,600/year
 Labor cost : Bs 0.1/racimo = Bs 5/ton x 2,392 ton/year = Bs 11,960/year
 Packing material cost : 0
 Sales section rental fee : Bs 14,600/year x 2 sections = Bs 29,200 / year
 Tax : Bs 300/year

(2) Sales section rental fee : Bs 40 / day / section = Bs 14,600 / year / section

(3) Tax: simplified tax. RTS standard setting for uncalculated sales profit

Table A.2.6-2 REVENUE AND EXPENDITURE OF WHOLESALERS IN NWM (5/5)
CITRUS FRUITS Unit: Bs

Item	Fixed Cost	Variable cost	Sum
1. Revenue (sales)	-	1,678,000	1,678,000
2. Expenditure (purchase)	-	1,619,200	1,619,200
Gross income	-	58,800	58,800
3. Other expenditures	29,500	25,760	55,260
(1) Labor cost	-	11,040	11,040
(2) Packing material cost	-	14,720	14,720
(3) Sales section rental fee	29,200	-	29,200
(4) Tax	300	-	300
4. Profit before tax	-	-	3,840
5. Profit after tax	-	-	3,540

Remarks:

(1) Assumption

- Product : Citrus Fruits (Naranja), Seasonal fruit harvest 4 mo/year
 Handling volume : 46 ton/week = 736 ton/year
 Loss in wholesale stage : 5%
 Purchasing price : Bs 22/100 units = Bs 22/10kg = Bs 2,200/ton x 736 ton/year
 = Bs 1,619,200/year
 Sales price : Bs 24/100 units = Bs 24/10kg = Bs 2,400/ton x 736 ton/year x 0.95
 = Bs 1,678,080/year
 Labor cost : Bs 1.5/10 box (10kg) = Bs 0.015/kg = Bs 15/ton x 736 = Bs 11,040/year
 Packing material cost : Bs 5/box (Life span 25 times use) x 100 box/ton = Bs 500/ton/25 times
 = Bs 20/ton x 736 ton/year = Bs 14,720/year
 Sales section rental fee : Bs 14,600/year x 2 sections = Bs 29,200 /year
 Tax : Bs 300/year

(2) Sales section rental fee : Bs 40 / day / section = Bs 14,600 / year / section

(3) Tax: simplified tax. RTS standard setting for uncalculated sales profit

Table A.2.6-3 BREAK-EVEN POINT OF WHOLESALERS IN NWM

	Unit: Bs				
Item	Potato	Tomato	Onion	Banana	Citrus fruites
FC (Bs.)	29,500	43,500	29,500	29,500	29,500
VC (Bs.)	3,193,320	1,849,734	1,016,600	559,760	1,644,960
Vcu (Bs/kg)	1.335	0.773	0.425	0.280	2.235
Pu (Bs/kg)	1.390 x 0.98	0.900 x 0.95	0.520 x 0.98	0.4 x 0.75	2.400 x 0.95
	= 1.362	= 0.855	= 0.510	= 0.300	= 2.280
Pu-Vcu (Bs/kg)	0.027	0.082	0.085	0.020	0.045
Qe (ton/year)	1,092.6	530.5	348.7	1,475.0	655.6
Qe (ton/week)	21.0	10.2	6.7	28.4	41.0

Remarks:

Equation of Break Even Point: $Q_e = FC / Pu - Vcu$

Qe = Break-even point

FC: Fixed Cost (Bs.)

VC: Variable Cost (Bs.)

Vcu: Variable Cost per unit (Bs/kg)

Pu: Unit Price (Bs/kg)

Table A.2.6-4 NET INCOME OF WHOLESALERS IN NWM

Products	Unit: Bs/yr or US\$/yr															
	Sales		Purchase Price		Gross Income		Variable Cost		Fixed Cost		Number of wholesalers		in 2005		in 2010	
	A	B	C=A-B	D	E	F	G=(C-D-E)xF	Net Income (Bs)	Net Income (US\$)	Net Income (US\$)	Net Income (US\$)					
Wholesalers transferred from Abasto Market																
Potato	3,258,160	3,109,600	148,560	83,720	26,630	30	1,146,300									
Tomato	2,045,160	1,794,000	251,160	55,734	47,205	10	1,482,210									
Onion	1,218,963	932,880	286,083	83,720	47,130	28	4,346,524									
Banana	717,600	657,800	59,800	11,960	16,346	19	598,386									
Citrus	1,678,000	1,619,200	58,800	25,760	16,346	1	16,694									
Sub-Total						88	7,590,114									
Producers/CAICO/CAISY/Supermarket Associations																
							1,119,853									
Total							8,709,967									

Remarks

1. Fixed cost is based on the existing wholesalers in Abasto market and assumed to be the profit after tax (see Table 3-22 in Main Report)
2. Net income of producers/CAISY/CAICO/Supermarket associations is calculated as 9/61 of net income of wholesalers transferred from Abasto Market.

Refer to Main Report, Chapter 3.22. (2), 2), d.

Table A.2.6-5 Income Statement and Cash Flow for Management Body of New Wholesale Market

Unit: US\$

	2001	1	2	3	4	5	6	7	8	9	10	11	12	13
I														
Income Statement														
A. Revenue	173,724	173,724	348,071	348,809	349,548	350,624	351,701	352,778	353,854	354,931	356,008	357,084	358,161	359,237
1) Rental fee of space	162,367	162,367	324,733	324,733	324,733	324,733	324,733	324,733	324,733	324,733	324,733	324,733	324,733	324,733
2) Entering truck charge	11,357	11,357	23,338	24,076	24,815	25,891	26,968	28,045	29,121	30,198	31,274	32,351	33,428	34,504
B. Expense	283,362	283,362	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724
1) Operation	66,744	66,744	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488
2) Maintenance	28,641	28,641	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282
3) Depreciation	187,977	187,977	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954
4) Interest														
C. Income before Depr.&Interest	78,338	78,338	157,301	158,039	158,778	159,854	160,931	162,008	163,084	164,161	165,237	166,314	167,391	168,467
D. Net Income	-109,639	-109,639	-218,654	-217,915	-217,176	-216,100	-215,023	-213,947	-212,870	-211,793	-210,717	-209,640	-208,564	-207,487
II														
Cash Flow														
A. Source of Funds	8,152,423	8,152,423	8,424,904	157,301	158,039	158,778	159,854	160,931	162,008	163,084	164,161	165,237	166,314	167,391
1) Government	8,152,423	8,152,423												
2) Loan														
3) Own equity														
4) Depreciation		187,977	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954
5) Net income		-109,639	-218,654	-217,915	-217,176	-216,100	-215,023	-213,947	-212,870	-211,793	-210,717	-209,640	-208,564	-207,487
B. Uses of Funds	8,152,423	8,152,423	8,346,566	52,007										
1) Building	8,073,969	8,073,969	8,298,337											
2) Equipment	78,454	78,454	48,229											
3) Reinvestment														
4) Repayment of loan														
C. Net cash flow	78,338	78,338	157,301	158,039	158,778	159,854	160,931	162,008	163,084	164,161	165,237	166,314	167,391	168,467

Remarks:

1. Revenue (rental and truck charge) and Expenses (Operation, maintenance and depreciation) during the 1st year of operation will be approximately half of normal years operation due to phased construction.
2. Rental space charged at Bs.25/day for one lot (15 sqm)
3. Truck charge at Bs.1 for jeep, Bs.3 for 5 ton truck, Bs.5 for 10 ton truck, and Bs.10 for 20 ton truck.
4. Depreciation, Maintenance and Reinvestment costs are calculated based on 65% of Building/Equipment cost assuming depreciation, maintenance & reinvestment are undertaken at local prices by local contractors/suppliers.
5. Operation expense (personnel, utilities, electricity, etc.) rationalized for effective operation.

Table A.2-6-6 Income Statement and Cash Flow for Management Body of New Wholesale Market (revenue increased to cover depreciation)

Unit: US\$

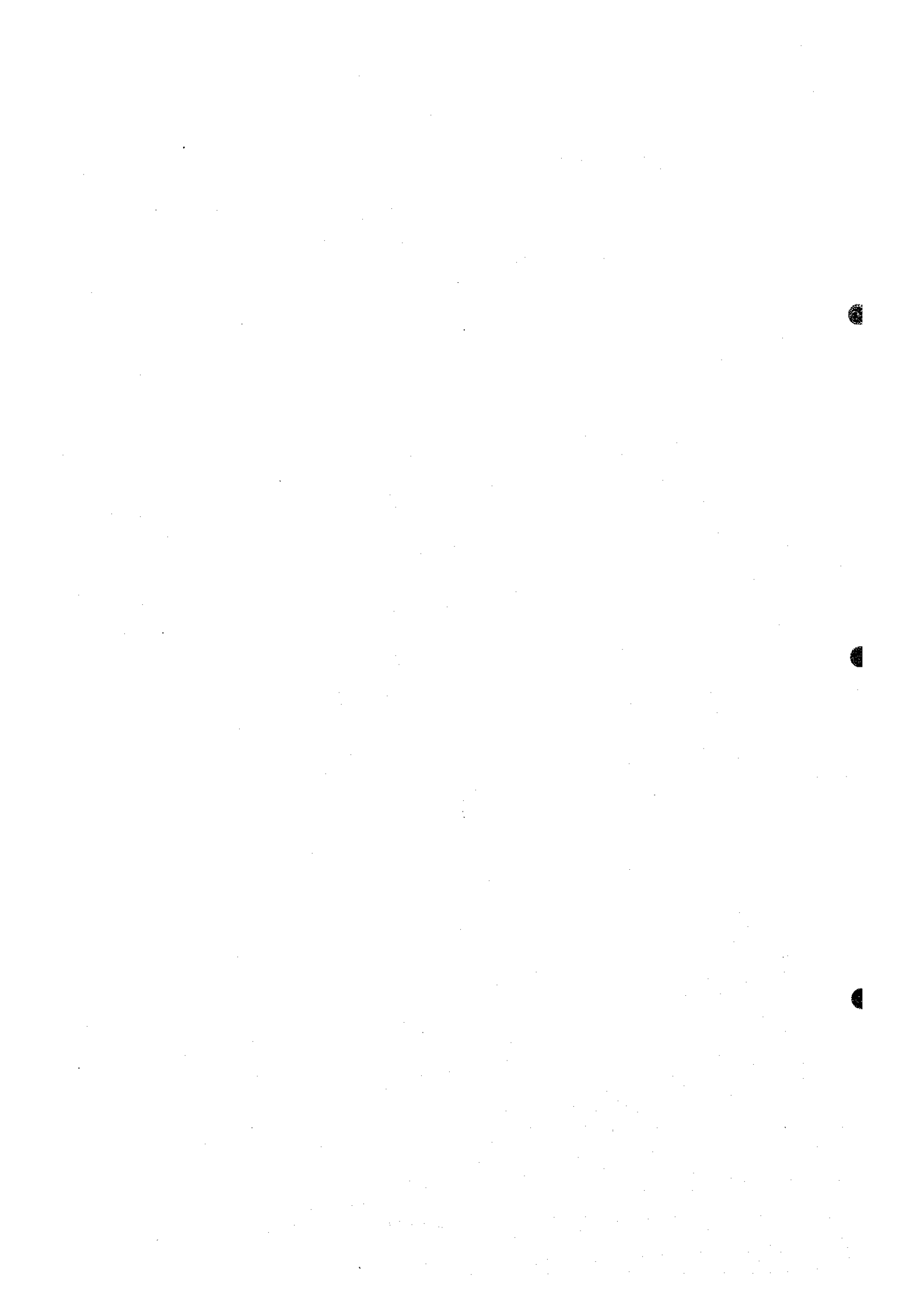
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
I																	
Income Statement																	
A. Revenue	282,500	566,246	567,725	569,202	571,556	573,509	575,662	577,815	579,969	582,122	584,275	586,428	588,582	590,735	592,888	595,041	
1) Rental fee of space	259,786	519,573	519,573	519,573	519,573	519,573	519,573	519,573	519,573	519,573	519,573	519,573	519,573	519,573	519,573	519,573	
2) Entering truck charge	22,714	46,675	48,152	49,629	51,783	53,936	56,089	58,242	60,396	62,549	64,702	66,855	69,009	71,162	73,315	75,468	
B. Expenses	283,362	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	566,724	
2) Operation	66,744	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	133,488	
3) Maintenance	28,641	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	57,282	
4) Depreciation	187,977	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	
5) Interest																	
C. Income before Depn.&Interest	187,115	375,478	376,955	378,432	380,586	382,739	384,892	387,045	389,199	391,352	393,505	395,658	397,811	399,965	402,118	404,271	
D. Net Income	-862	-476	1,001	2,478	4,631	6,785	8,938	11,091	13,244	15,398	17,551	19,704	21,857	24,010	26,164	28,317	
II																	
Cash Flow																	
A. Source of Funds	8,152,423	8,533,681	375,478	376,955	378,432	380,586	382,739	384,892	387,045	389,199	391,352	393,505	395,658	397,811	399,965	402,118	
1) Government	8,152,423	8,346,566															
2) Loan																	
3) Own equity																	
4) Depreciation		187,977	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	375,954	
5) Net income		-862	-476	1,001	4,631	6,785	8,938	11,091	13,244	15,398	17,551	19,704	21,857	24,010	26,164	28,317	
B. Uses of Funds	8,152,423	8,346,566															
1) Building	8,073,969	8,298,337															
2) Equipment	78,454	48,229															
3) Reinvestment																	
4) Repayment of loan																	
C. Net cash flow	187,115	375,478	376,955	378,432	380,586	382,739	384,892	387,045	389,199	391,352	393,505	395,658	397,811	399,965	402,118	404,271	

Remarks:
 1. Revenue (rental and truck charge) and Expenses (Operation, maintenance and depreciation) during the 1st year of operation will be approximately half of normal years operation due to phased construction.
 2. Rental space charged at Bs.40/day for one lot (15 sqm)
 3. Truck charge at Bs.2 for Jeep, Bs.6 for 5 ton truck, Bs.10 for 10 ton truck, and Bs.20 for 20 ton truck.
 4. Depreciation, Maintenance and Reinvestment costs are calculated based on 65% of Total Cost assuming depreciation, maintenance & reinvestment are undertaken at local prices by local contractors/suppliers.
 5. Operation expense (personnel, utilities, electricity, etc.) rationalized for effective operation.

ANNEX 2
Fruit and Vegetable Marketing System, and Planning of Wholesale Market

Reference Documents

**Official Letters and Minutes of Meeting about
Project Site Determination for New Wholesale Market**

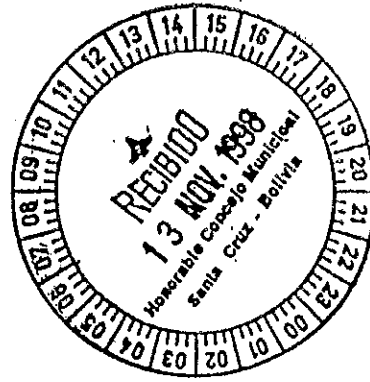




REPUBLICA DE BOLIVIA
EFECTURA DEL DEPARTAMENTO
SANTA CRUZ

98-01532

11 de noviembre de 1998
DDDS. OF. N° 507/98



Señor:
Dr. Bismark Kreidler
PRESIDENTE DEL HONORABLE
CONCEJO MUNICIPAL
Ciudad.-

REF.: SOLICITUD CUMPLIMIENTO DE COMPROMISO ASUMIDO EN EL
CONVENIO INTERINSTITUCIONAL PLAN MAESTRO DE
COMERCIALIZACION FRUTIHORTICOLA.-

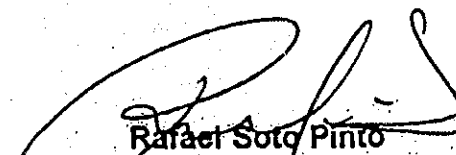
De mi mayor consideración:

Por intermedio de la presente, me dirijo a Ud. en su calidad de presidente del Honorable Concejo Municipal de Santa Cruz de la Sierra, para que realice las gestiones que sean necesarias para dar cumplimiento al compromiso asumido por el Gobierno Municipal en el Convenio interinstitucional Plan Maestro de Comercialización Frutihortícola, el mismo que consiste en *"dotar el terreno necesario y suficiente para la construcción del nuevo mercado mayorista según el diseño inicial y ampliaciones futuras"*.

En ese sentido, tenemos conocimiento que la Oficina Técnica del Plan Regulador en el oficio O.G.G.N° 122/98 del 27 de octubre, dirigido a su persona, ha identificado dos posibles lotes para la construcción del futuro Mercado Mayorista Campesino. Ante lo cual, el equipo técnico del JICA ha elegido el "Lote B" como la mejor opción para la ubicación del mercado, con una extensión de seis hectáreas.

Por lo anteriormente expuesto, solicitamos sea tomada en cuenta la selección arriba señalada y consiguientemente se realice en el menor tiempo posible la expropiación del terreno en cuestión, en el marco de lo establecido en la Ley Orgánica de Municipalidades en el Título IV, capítulo IV. Esta medida permitirá al equipo técnico del JICA realizar el levantamiento topográfico de la zona donde será construido el futuro mercado.

Con este motivo, reiteramos a Ud. nuestras consideraciones más distinguidas.


Rafael Soto Pinto
DIRECTOR DEPARTAMENTAL
DE DESARROLLO SOSTENIBLE





REPUBLICA DE BOLIVIA
PREFECTURA DEL DEPARTAMENTO
SANTA CRUZ

18/ NOV. /1998.
OF. D.D.D.S.U.P.100/98

ING. ROBERTO RIOS VALDEZ
JEFE FISCALIZACIÓN DOBLE VÍA LA GUARDIA - SANTA CRUZ

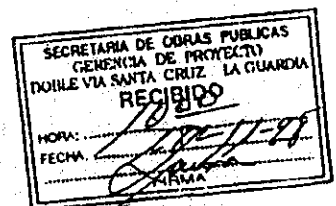
REF.- SOLICITUD DE INFORMACIÓN SOBRE LA DOBLE VÍA LA GUARDIA-SANTA CRUZ
EN EL TRAMO DE LA U.V. 189

Distinguido ingeniero:

El Objeto de la siguiente solicitud de información del acceso directo de la doble vía La Guardia - Santa Cruz sobre la U. V. 189, es para poder analizar la ubicación con respecto a la ubicación Del Nuevo Mercado Mayorista . La oficina Técnica del Plan Regulador en el oficio O.G.G.No 122/98 del 27 de octubre, ha identificado dos posibles lotes para la construcción del futuro Mercado Mayorista Campesino , alternativas A y B .

Además solicitamos a su autoridad la referencia técnica adecuada para la elección de una de las alternativas A o B , ya que la doble vía es de alto tráfico y será de mucha importancia conocer el tramo para identificar los retornos , rotondas y futuras avenidas y calles perimetrales a la opción B .
(adjuntar los planos correspondientes del análisis.) , contando con su valiosa colaboración .

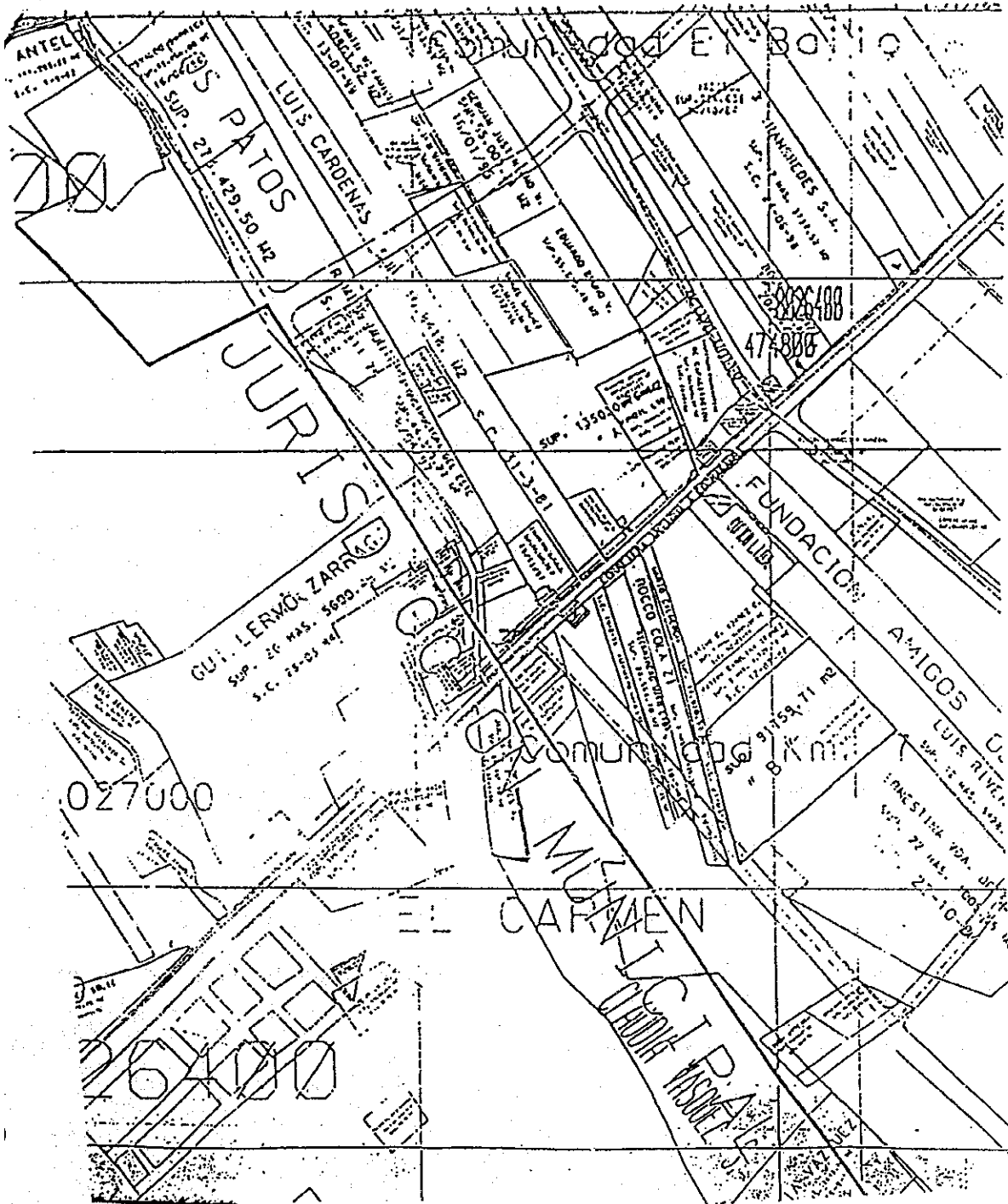
Saludamos a usted con las consideraciones más distinguidas.
Atentamente,



Lc. Guillermo Serrate Céspedes

CONTRAPARTE NAL. DEL PROYECTO COMERCIALIZACIÓN FRUTIHORTICOLA





27-429-50-12



SECRETARIA DE OBRAS PUBLICAS GOBIERNO MUNICIPAL

"El Gobierno Municipal es autónomo. En las capitales de departamento, habrá un Concejo Municipal y un Alcalde" Art. 200 C.P.E.

OF-DVLG-GP-525/98
á, 23 de Noviembre de 1998

Señor
Lic. Guillermo Serrate Céspedes
**CONTRA PARTE NACIONAL DEL PROYECTO
COMERCIALIZACION FRUTIHORTICULA**
Presente.-

Ref.- SU OFICIO DDD. SUP. 100/98

Distinguido Licenciado:

De acuerdo a la solicitud contenida en su oficio de referencia, por la presente señalo a usted lo siguiente:

El Proyecto Santa Cruz - La Guardia es una obra vial que tiene además un sistema de drenaje pluvial ubicado en el centro de la vía, ciclovías, paisajismo, iluminación, construcción de intersecciones o rotondas señalizaciones (se adjunta un perfil geométrico de la vía).

Referente a la alternativa A y B señalada en su oficio, expreso lo siguiente :

- 1.- Ambas alternativas estan muy próximas (400 mts. aprox.) al 8vo. anillo (sector Colegio Berea), allí se tiene previsto la construcción de una intersección incluyendo sus retornos vehiculares.
- 2.- Como se podrá apreciar en el perfil geométrico adjunto, se tiene 3 vias de ida y 3 de vueltas cada una de 3,50 mts. de ancho.

De lo expuesto anteriormente se puede deducir que al definir unas de las alternativas dependerá del acceso vehicular hacia el lugar donde se construirá el mercado sin interrumpir el tráfico en ambos sentidos, garantizando la seguridad tanto vehicular como peatonal.

Por otra parte, si bien este proyecto (Doble vía a la Guardia), contempla un sistema de drenaje pluvial, este de ninguna manera puede servir para sistema de drenaje sanitario (aguas servidas o desecho líquido).

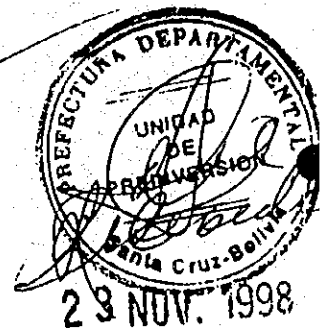
En tal sentido la mejor alternativa desde el Dpto. de vista del proyecto es la mas alejada a la vía, sin embargo un estudio de impacto ambiental será el que determine como último la ubicación del mismo

Es todo lo que informo a usted respecto a su solicitud, esperando que sea de su satisfacción lo expresado, sin otro particular me despiedo muy atentamente.

Sin otro particular, saludo a usted muy atentamente.

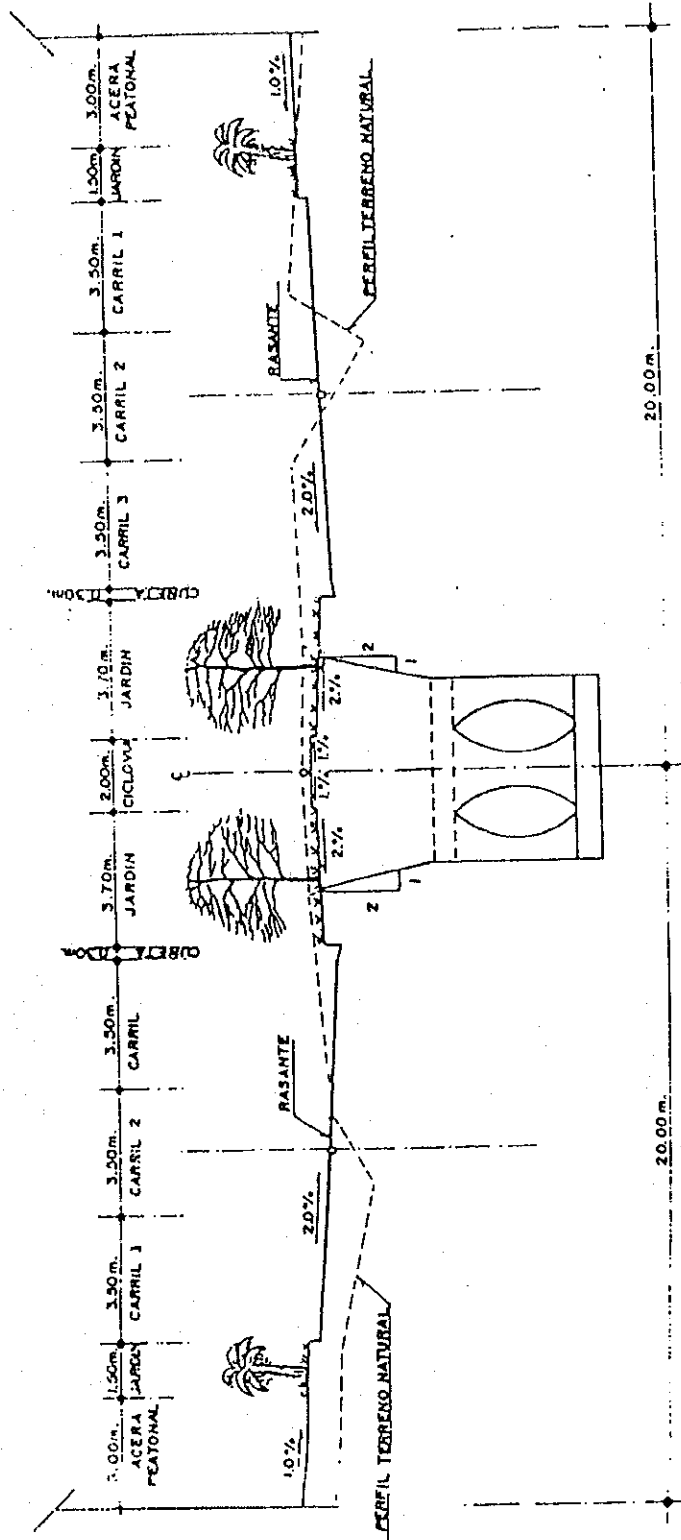
Ing. Roberto F. Ríos Valdéz
**GERENTE FISCALIZACION PROYECTO
DOBLE VIA SANTA CRUZ - LA GUARDIA**

cc. Arch.
RFRV./Lht.



TRAMO: CUARTO ANILLO - KM 9

SECCION TIPO
DISEÑO REVISAD2



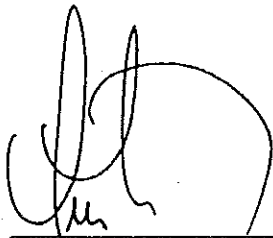
CONNAL S.R.L.

Esc. H:1:200
V:1:100

GRAFICO N:

**ACTA DE LA REUNION
SOBRE EL LUGAR
DEL NUEVO MERCADO MAYORISTA
EN
SANTA CRUZ - BOLIVIA**

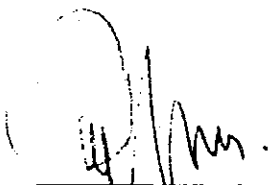
Santa Cruz, Noviembre 25, 1998



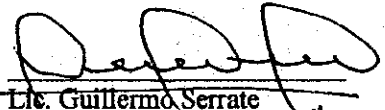
Arq. Oscar Barbery
Gerente del Plan Regulador
de la Ciudad de Santa Cruz
República de Bolivia



Tateo Kusano
Líder del Equipo JICA
Equipo de Estudio JICA



Arq. Freddy Gianella
Director de Planificación Urbana
del Plan Regulador de la Ciudad
de Santa Cruz
República de Bolivia



Lic. Guillermo Serrate
Dirección de Desarrollo
Sostenible
Prefectura de Santa Cruz
República de Bolivia

**ACTA DE LA REUNION
SOBRE EL LUGAR
DEL NUEVO MERCADO MAYORISTA
EN
SANTA CRUZ - BOLIVIA**

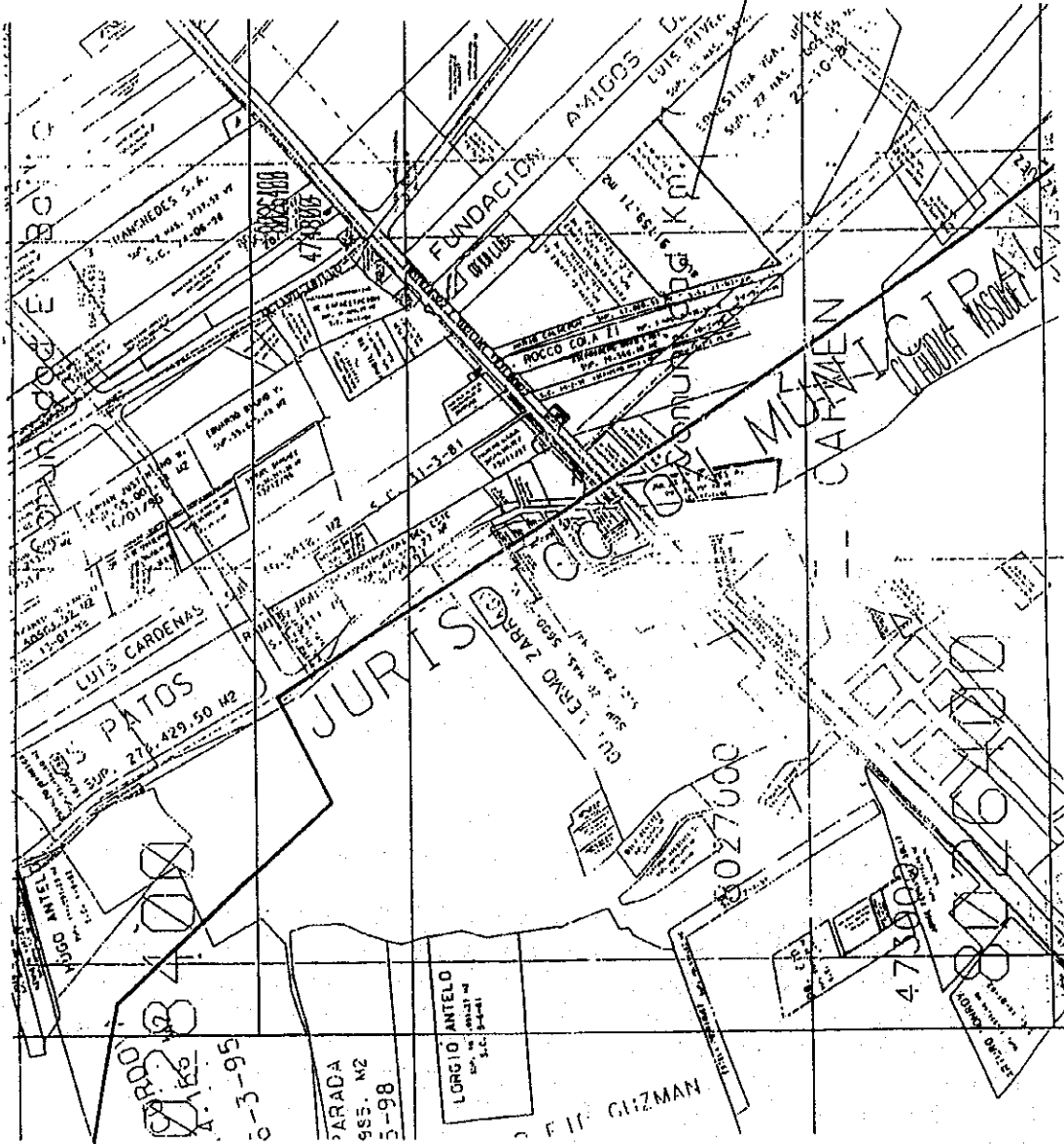
Fecha: 25 de noviembre de 1998
Lugar: Salón de Conferencia del Plan Regulador de la Ciudad de Santa Cruz
Participantes: Arq. Oscar Barbery S. (Consejo del Plan Regulador)
Arq. Gianella (Consejo del Plan Regulador)
Lic. Guillermo Serrate (Dirección de Desarrollo Sostenible)
Arq. Sara Barrancos (Dirección de Desarrollo Sostenible)
Mr. Tateo Kusano (Equipo de Estudio JICA)
Mr. Mutsumi Gando (Equipo de Estudio JICA)
Mauricio Quintela (Interprete del Equipo de Estudio JICA)

Esta reunión se sostuvo con la presencia de los representantes del Plan Regulador de la Ciudad de Santa Cruz, los representantes de la Dirección de Desarrollo Sostenible de la Prefectura del Departamento de Santa Cruz y el Equipo de Estudio JICA, con el propósito de llegar en conjunto a un acuerdo formal sobre el lugar para el Nuevo Mercado Mayorista y para realizar los arreglos necesarios para dar curso a los estudios de suelos (estudios topográficos, de suelo y agua) para el Nuevo Mercado Mayorista, contemplados en el Estudio de Factibilidad para el Mejoramiento del Sistema de Mercadeo Agrícola en Santa Cruz.

Como resultado de esta reunión se llegó a las siguientes conclusiones:

- (1) En las reuniones del Informe Intermedio del Estudio, llevadas a cabo el 30 de octubre de 1998 y el 3 de noviembre de 1998, los representantes de la Prefectura de Santa Cruz, del Gobierno Municipal, Ministerio de Agricultura, Ganadería y Desarrollo Rural y del Vice Ministerio de Inversión Pública y Financiamiento Externo - Ministerio de Finanzas, aprobaron a la U.V. 189 de la Ciudad de Santa Cruz como el lugar donde se conducirá el estudio de factibilidad para el nuevo mercado mayorista. Aceptando esta aprobación, el Plan Regulador, el Departamento de Desarrollo Sostenible y el Equipo de Estudio JICA confirmaron que uno de los lotes en la U.V. 189 (localizado a aproximadamente 500 metros sudeste de la Ruta 4, terreno de 9,17 hectáreas, refiérase a la hoja adjuntada) es el Lugar para el Nuevo Mercado Mayorista.
- (2) El Plan Regulador y la Dirección de Desarrollo Sostenible entendieron como urgente y necesario obtener una Ordenanza del Concejo Municipal con el propósito de iniciar los procedimientos legales para la preparación del terreno, con el objeto de que el Estudio pueda continuar.
- (3) El Plan Regulador y la Dirección de Desarrollo Sostenible también entendieron que era necesario empezar con los estudios topográficos de suelo y agua en el lugar de la U.V. 189, de forma paralela a los trámites de obtención de la Ordenanza del Concejo Municipal. Por ende, el Plan Regulador aceptó entregar apoyo técnico a la Dirección de Desarrollo Sostenible para que se lleven a cabo los trabajos topográficos en el lugar. La Dirección de Desarrollo Sostenible también aceptó brindar apoyo legal y técnico al Equipo de Estudio JICA para la realización de los estudios de suelo y agua en el lugar.

Site for the New Wholesale Market
Lugar para el Nuevo Mercado Mayorista



REPUBLICA DE BOLIVIA
PREFECTURA DEL DEPARTAMENTO
SANTA CRUZ

OF.D.P.-DDDS.568/98

, 01 de Diciembre de 1998

Señor

● Dr. Bismar Kreidler F.
PRESIDENTE H. CONSEJO MUNICIPAL

Presente.-

Ref : SOLICITUD DE HOMOLOGACIÓN DE CONVENIO Y PROMULGACIÓN DE ORDENANZA MUNICIPAL DE DECLARACIÓN DE TERRENO COMO DE UTILIDAD PÚBLICA - PLAN MAESTRO DE COMERCIALIZACION FRUTIHORTICOLA (MERCADO MAYORISTA).-

De nuestra mayor consideración:

Me dirijo a su autoridad para solicitarle se proceda con carácter de urgencia a la homologación del Convenio Inter-institucional firmado entre el Gobierno Municipal, la Prefectura del Departamento y otras Instituciones regionales a objeto de viabilizar la consecución del Proyecto citado en la referencia. Asimismo, es imperativo que se apruebe la ordenanza respectiva en la cual se declare el terreno considerado para la implementación del proyecto, como terreno de utilidad pública, a fin de que los técnicos de la Agencia de Cooperación Japonesa (JICA), procedan a efectuar los estudios faltantes en la etapa de factibilidad.

Cabe mencionar que la indicada Agencia de Cooperación, ha anunciado que suspenderá la realización del estudio de factibilidad, de no contar con la correspondiente autorización para efectuar los estudios de forma inmediata, truncando un proyecto de gran necesidad para el Municipio de Santa Cruz de la Sierra y el Departamento, con un financiamiento no reembolsable de 15 a 20 millones de dólares.

En vista de la urgencia que tiene el equipo técnico de JICA para realizar los estudios topográficos de suelo y agua, pido a usted que instruya al Plan Regulador prestar el apoyo correspondiente para realizar estos trabajos, a partir del día 2 del presente mes.

Considerando la situación de emergencia que nos encontramos, no dudamos de la deferencia positiva que encontrará la presente.

● Sin otro particular reiteramos a usted nuestras consideraciones más distinguidas.



Freddy Terrazas S.
Dr. Freddy Terrazas S.
PREFECTO DEL DEPARTAMENTO



Concejo Municipal

"El Gobierno y la Administración de los Municipios están a cargo de Gobiernos Municipales Autónomos y de igual jerarquía" Art. 200 C.

OF. INT. SG. No. 689/98.-
diciembre 08 de 1.998.-

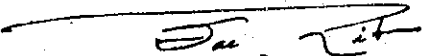
Señor
Johnny Fernández Saucedo,
HONORABLE ALCALDE MUNICIPAL.
Su Despacho.-

REF.: REMISION ORDENANZA MUNICIPAL No. 048/98

Distinguido Señor Alcalde:

Mediante el presente remitimos a usted, la Ordenanza Municipal de referencia, que declara de necesidad y utilidad pública y consiguiente expropiación los terrenos ubicados en la Zona ZAPU, Distrito 10, colindante con la U.V. 189, con una superficie de 107.346,32 m². Los terrenos expropiados serán destinados a la construcción de un Mercado Mayorista, considerando prioritario dentro de las políticas sobre abastecimiento y mercados del Gobierno Municipal.

Con este particular motivo, saludamos a usted muy atentamente.


Prof. Sarah Ribera de Ribera,
H. CONCEJAL SECRETARIA.


Dr. Bismarck Kreidler Flores,
H. CONCEJAL PRESIDENTE.

czm.
c.c. : Arch.



Concejo Municipal

Gobierno y la Administración de los Municipios están a cargo de Gobiernos Municipales Autónomos y de igual jerarquía" Art. 200 C.P.E.

Por cuanto el Honorable Concejo Municipal.
Ha sancionado la siguiente:

ORDENANZA MUNICIPAL No. 048/98.
A. 7 de diciembre de 1998

Dr. Bismarck Kreidler Flores
PRESIDENTE DEL HONORABLE CONCEJO MUNICIPAL
DE SANTA CRUZ DE LA SIERRA

CONSIDERANDO:

Que, según la Ley Orgánica de Municipalidades en sus Arts. 82, 83, y 84, se faculta al Gobierno Municipal el derecho de expropiar bienes inmuebles, dentro de su jurisdicción, previa declaratoria de utilidad pública.

Que, la planificación y la promoción del desarrollo urbano se rigen por disposiciones tendientes a adoptar políticas, programas y proyectos en las diferentes áreas para el buen servicio a la comunidad.

Que, es competencia municipal la construcción, administración y mantenimiento de mercados, de conformidad al Art. 9º, numeral 7, de la Ley Orgánica de Municipalidades.

Que, mediante Resolución Municipal No. 160/98 de 7 de diciembre de 1998, se aprobó el Convenio Interinstitucional Plan Maestro de Comercialización Frutihortícola, suscrito el 20 de noviembre de 1997, entre el Gobierno Municipal de Santa Cruz de la Sierra, la Prefectura del Departamento, Cámara Agropecuaria del Oriente, Asofrut y Federación Unica, con el objeto de realizar los estudios que justifiquen la necesidad de construir infraestructuras en mercados mayoristas y centros de acopio y se realice un diagnóstico completo de la situación de los rubros frutihortícolas.

Que, en el referido Convenio Interinstitucional, el Gobierno Municipal se compromete a dotar del terreno necesario y suficiente para la construcción del nuevo mercado.

CONSIDERANDO:

Que, para estos casos se halla instituido el trámite de expropiación, contenido a los Arts. 19, atribución 14 y 82 de la Ley Orgánica de Municipalidades.

POR TANTO:

El Honorable Concejo Municipal, en uso de las atribuciones conferidas por la Constitución Política del Estado y la Ley Orgánica de municipalidades, dicta la siguiente:



Concejo Municipal

El Gobierno y la Administración de los Municipios están a cargo de Gobiernos Municipales Autónomos y de igual jerarquía" Art. 200 C.P.E.

ORDENANZA

Artículo 1º.- Declárese de necesidad y utilidad pública y consiguiente expropiación los terrenos ubicados en la Zona ZAPU, Distrito 10, colindante con la U.V. 189, con una superficie de 107.346,32 m2., limitados por los siguientes puntos de coordenadas.

1.-	V1 - 475486,29	8026927,02
2.-	V2 - 475647,98	8026745,38
3.-	V3 - 475318,58	8026466,93
4.-	V4 - 475140,60	8026633,07

Artículo 2º.- Los terrenos expropiados, serán destinados a la construcción de un Mercado Mayorista, considerado prioritario dentro de las políticas sobre abastecimiento y mercados del Gobierno Municipal.

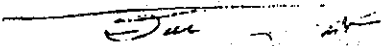
Artículo 3º.- Se instruye a la Oficina Técnica del Plan Regulador para que modifique la estructura vial y el uso de suelo del entorno de los terrenos expropiados.

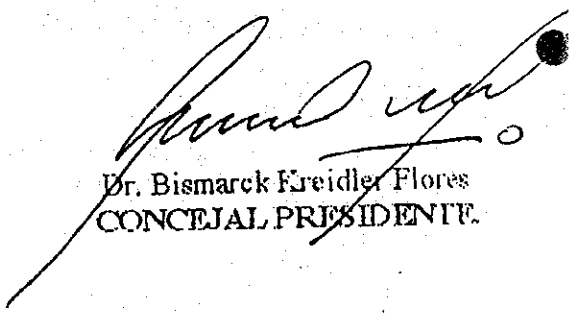
Artículo 4º.- Las personas naturales o jurídicas que se creyeran con derecho a la indemnización, deberán apersonarse ante el Departamento Legal del Gobierno Municipal, a objeto de acreditar sus derechos propietarios, dentro del término de 30 días a partir de la fecha, debiendo al efecto acompañar sus escrituras debidamente inscritas en Derechos Reales, Comprobantes de Pago de Impuestos al día y el Plano visado por el Plan Regulador.

Artículo 5º.- En caso que el estudio de factibilidad que contempla el Convenio Interinstitucional, requiera de otra área de terreno para la implementación del proyecto, el Gobierno Municipal se compromete a ubicar y dotar del terreno suficiente dentro de su jurisdicción, de acuerdo al compromiso contraído en el mencionado Convenio.

Artículo 6º.- El Ejecutivo Municipal queda encargado de la ejecución y cumplimiento de la presente Ordenanza Municipal, de conformidad al Art. 84 de la Ley Orgánica de Municipalidades.

Es dada en el salón de sesiones del Honorable Concejo Municipal de la ciudad de Santa Cruz de la Sierra, a los siete días del mes de diciembre de mil novecientos noventa y ocho años.


Prof. Sarah Ribera de Ribera
CONCEJAL SECRETARIA.


Dr. Bismarck Freidler Flores
CONCEJAL PRESIDENTE.



Concejo Municipal

"El Gobierno y la Administración de los Municipios están a cargo de Gobiernos Municipales Autónomos y de Igual Jerarquía" Art. 200 C.P.E.

OF. INT. SG. No. 688/98.-
diciembre 08 de 1.998.-

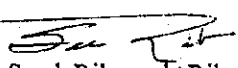
Señor
Johnny Fernández Saucedo,
HONORABLE ALCALDE MUNICIPAL.
Su Despacho.-

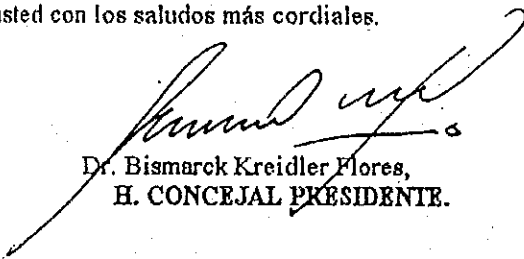
REF.: REMISION RESOLUCION MUNICIPAL No. 160/98

Distinguido Señor Alcalde:

Mediante el presente remitimos a usted, la Resolución Municipal de referencia, que aprueba el Convenio Interinstitucional Plan Maestro de Comercialización Frutihortícola, suscrito el 20 de noviembre de 1.997, entre el Gobierno Municipal de Santa Cruz de la Sierra con la Prefectura del Departamento de Santa Cruz, Cámara Agropecuaria del Oriente, Asohfrut y Federación Unica, de conformidad al Art. 19, numeral 11 de la Ley Orgánica de Municipalidades.

Con este particular motivo, nos despedimos de usted con los saludos más cordiales.


Prof. Sarah Ribera de Ribera,
H. CONCEJAL SECRETARIA.


Dr. Bismarck Kreidler Flores,
H. CONCEJAL PRESIDENTE.

ccm.
c.c.: Arch.



Concejo Municipal

"El Gobierno y la Administración de los Municipios están a cargo de Gobiernos Municipales Autónomos y de igual jerarquía" Art. 200 C.P.E.

RESOLUCION MUNICIPAL No. 160/98

A 7 de diciembre de 1998

CONSIDERANDO:

Que, es competencia municipal la construcción, administración y mantenimiento de mercados, de conformidad al Art. 9º, numeral 7 de la Ley Orgánica de Municipalidades.

Que, el Gobierno Municipal de Santa Cruz de la Sierra ha participado de la suscripción de un Convenio Interinstitucional Plan Maestro de Comercialización Frutihortícola, suscrito el 20 de noviembre de 1997 conjuntamente con la Prefectura del Departamento, Cámara Agropecuaria del Oriente, Asohfrut y Federación Unica, con el objeto de realizar estudios que justifiquen la necesidad de construir infraestructuras en mercados mayoristas y centros de acopio.

Que, es necesario aprobar dicho convenio para asegurar su fiel cumplimiento.

POR TANTO:

El Honorable Concejo Municipal, en uso de sus específicas atribuciones que le confiere la Ley Orgánica de Municipalidades, en sesión de fecha 07 de diciembre de 1998,

RESUELVE

Artículo Unico: Aprobar el Convenio Interinstitucional Plan Maestro de Comercialización Frutihortícola, suscrito el 20 de noviembre de 1997, entre el Gobierno Municipal de Santa Cruz de la Sierra con la Prefectura del Departamento de Santa Cruz, Cámara Agropecuaria del Oriente, Asohfrut y Federación Unica, de conformidad al Art. 19, numeral 11 de la Ley Orgánica de Municipalidades.

Regístrese, Comuníquese y Archívese.

Prof. Sarah Ribera de Ribera
CONCEJAL SECRETARIA

Dr. Bismarck Kreidler Flores
CONCEJAL PRESIDENTE