

3 PRESENT CONDITION OF THE WHOLESALE MARKET OF FRUITS AND VEGETABLES IN SANTA CRUZ

3.1 General Outline of Market in Santa Cruz City in 1998

There are two fruit and vegetable wholesale markets in Santa Cruz City. One is Abasto Market where all kinds of fruits and vegetables are traded and the other is Mutualista Market where only fruits are traded. Both markets have wholesale and retail functions. On the other hand, there are 32 municipal markets in Santa Cruz City as of 1998. These markets are retail markets and a wide range of commodities including fruits and vegetables are handled. Besides these markets, there are 18 supermarkets in the City at present. Total consumption volume of fruits and vegetables in Santa Cruz City is 287×10^3 t in 1998, approximately 90% of which (258×10^3 t) is marketed through Abasto Market. The remaining 29×10^3 t (10%) is traded through Mutualista and other markets.

3.2 Marketing Volume and Route in Abasto Market

Total inflow volume of fruits and vegetables in Abasto Market is 258×10^3 t/year in 1998. Out of this volume, only 7%, 18×10^3 t/year was directly sold to consumers. The remaining 240×10^3 t/year (93%) is handled through traders (wholesaler, retailer and intermediary). Therefore it is fair to say that Abasto Market is no longer a farmers' market but a municipal market.

Most of the inflow volume is traded through wholesalers (170×10^3 t/year, 66%). Wholesalers sell 90×10^3 t/year (35%) and 34×10^3 t/year (13%) to retailers in Abasto Market and other markets respectively. Also, wholesalers directly sell consumers 36×10^3 t/year (14%) that is almost equal to the volume sold to retailers in other markets. The remaining little volume is traded to big consumers/supermarkets and outside Santa Cruz. These volumes are 7×10^3 t/year (3%) and 3×10^3 t/year (1%).

Producers directly sell 47×10^3 t/year (18%) and 23×10^3 t/year (9%) to retailers in Abasto and other markets respectively, less than the volume transacted through wholesalers. Marketing volume and share in Abasto Market by marketing route in 1994 and 1998 is shown in Figure A.2.3-1 and 2.

3.3 History of Market Development

In the initial stage of the historical development of fruit and vegetable markets in Bolivia (the beginning of 1980s), MACA established several farmers' market through legal procedure in order for farmers to directly sell fruits and vegetables to consumers. Several years after the introduction of the farmers' market, municipal markets were legally authorized by the municipal government according to the municipal law and regulations. In these municipal markets, all commodities, not only fruits and vegetables, were handled by retailers and wholesalers. Abasto Market is composed of farmers' market and municipal market. Initially, farmers were the leading party of the farmers' market. Farmers gradually got excluded from Abasto Market, since the number of traders, not only those for fruits and vegetables, increased year by year, narrowing the space for direct sales by farmers. The decentralization policy under the present Bolivian government

was an additional force to sap the farmers' influence in the farmers' market of Abasto Market (see Table A.2.3-1).

3.4 Market Law/Regulation

Market law/regulation on the development and management/operation of the farmers' market, municipal market and Abasto Market are as follows.

- (1) Law / Regulation on the Market before the M/P Stage in 1994
 - 1) Farmers Market
 - a) Supreme Decree No. 17921 of 1981

This decree, authorize MACA to acquire a loan from Bolivia's Central Bank with the purpose to construct and equip Farmers Markets to be installed in each of the department capitals.

The total number of markets will be 15 (fifteen).
 - b) Supreme Decree No. 18057 of 1981

This decree modifies the above by settling that the Municipal Government will be the one in charge of the execution/carrying out of the mentioned project.
 - c) Supreme Decree No. 18245 of 1981

This decree authorizes MACA to delegate the administration of these markets to one of its affiliated bodies, which will be in charge of the retention of the sources generated by the market that serve to pay for the credit. If this money is insufficient, the issuing agent will debit one of the accounts of the General Treasury of the Nation. MACA prepares budget for such entries in accordance with the timetable for the loan payment.
 - d) Ministerial Resolution No. 548/81 of 1981.

This Resolution, authorizes the National Office of Agricultural Marketing (DNMA) entity depending on MACA, to carry out the functions of organizing and administrating the activities of the Farmers' Markets Project, in technical aspects relating to general supervision and contract.
 - e) Supreme Decree No. 20015 & 20427 of 1984

These decrees, dictates/authorizes that the Farmers' Markets built in the capitals of departments, are to be handed over from MACA to the Federation of Farmers, so they can hasten their construction and begin their operation in coordination with MACA. The Farmers' Markets in La Paz, Cochabamba, Oruro, Potosí, Sucre and Tarija have been transferred to their respective Departmental Farmers Federation.
 - f) Supreme Decree No. 20136 of 1984

This decree prescribes about the establishment of the Departmental Administration Committee for the management of the Farmers Market. The members of this committee are composed by the representatives of: Unique Federation of Farm Workers' Syndicate of Santa Cruz (FSUTCSC), Agrarian

Farmers' Corporation (CORACA), MACA, Corporation of Regional Development (Corporacion Regional de Desarrollo) and the Municipal Government. Decision-makers are: FSUTCSC and CORACA.

g) Supreme Decree No. 21493 of 1987

This decree prescribes that the Departmental Administration Committee is reorganized to Regional Council of Livestock Supply and Marketing (CRAMA). Members of CRAMA are: MACA, Corporation of Regional Development, Municipal Government, FSUTCSC and the Association of Producers.

2) Municipal Market

Organic Law of Municipality on January 10, 1985

Municipal Government is in charge of the construction, administration, and maintenance of the Municipal Markets.

3) Abasto Market

a) Regulations on the management of Abasto market by CRAMA, 1987

Regulations about the management of the Abasto Market was planned by CRAMA, and only one regulation concretely refers/directs about function and management of Abasto Farmers Market. This regulation directs/leads the following items: management and organization, management committee, collection and announcement of marketing information, registration of users, selection criteria for users, inspection of products, selling system, forms of payment and rules to be formulated such as entering, circulating and parking of vehicles, charge system for users, the utilization of facilities and prohibition/penalties, etc. This plan of regulations applies only for the Abasto Farmers' Market, though it has not been applied and implemented yet.

b) Municipal Ordinance No. 21/90

According to this ordinance, and considering the necessity of establishment of Farmers Market and/or Wholesale Market and also the urgent necessity of proper programming, organization and implementation planning of the Municipal Market; Municipal Council dictated the general policies for the Municipal Markets, which include the following:

- implementation of a test plan for transfer/relocation of merchants (not only agricultural products but also other commodities) from Abasto Market to U.V. 30 and 54.
- shared planning and coordination with the different associations and cooperatives.
- function of Farmers' and/or Wholesale markets.
- investigation of commodity supply system and hasten of the market construction.
- communication of market's policies to population in general.

(2) Law / Regulation on the Market at the F/S stage in 1998

After M/P stage in 1994, there are no new law/regulations, concerning market at the national and departmental level, except for the Decentralization Law.

1) Decentralization Law No. 1654 of 1995

a) Central Government conferred the following powers to the Prefecture:

- To make out and execute programs and projects for public investment within the framework of a departmental development plan in the areas of:
- Programs for municipal works.
- Other issues related to Municipal Government
- To channel requirements, and relations among Municipal Governments.
- To set administrative resolutions, contracts and agreements, delegate and decentralize technical-administrative tasks.

b) Central Government conferred the following power to the Departmental Council:

- To set up interinstitutional agreements.
- To promote coordination with Municipal Governments and other institutions within their jurisdiction.

After Decentralization Law it is not necessary to conform to Supreme Decree No. 21493 on establishment of CRAMA, since the Prefectural Resolution established by the Departmental Council is enough to establish an organization such as CRAMA.

2) Municipal Market

a) Municipal Resolution No. 360/95 of 1995

Approves the applying of the USUFRUCT System for Association of Commerce 15 de Febrero, in Ramada Market.

b) Municipal Resolution No. 160/96 of 1996

Division of one part of the new building of Mutualista Market constructed by Municipal Government for Association 13 de Agosto.

3) Abasto Market

a) Expansion of parking area by Municipal Ordinance No. 55/95 of 1995

This ordinance authorizes the expropriation of a real estate with an extension of 12.108 m². This land site neighbors the Abasto market (Pirai) and will be used for the expansion and ordering of the mentioned market. This ordinance was implemented. The real estate is actually being used as a parking area for big trucks that transport fruits (banana, citrus fruits, etc.) and as a settlement of several shops of wholesalers and retailers.

b) Preparation of regulation of Abasto market (wholesale farmers' market)

Coordination and Follow-Up Committee of M/P has prepared and revised regulations of Abasto Market done by CRAMA and has planned a draft regulation for the management of Abasto Market by the end of August 1998, which has already been submitted to the Municipal Council for investigation on 27 August, 1998.

The major contents included in this regulation are on management committee, structure of the management body, collection and distribution of market information, registration of users, inspection of products, selling system, forms of payment and rules to be formulated regarding entering, circulating and parking of vehicles, charge system for users, utilization of facilities and prohibition/ penalties, etc. Regarding legal procedure of the regulation of Abasto Market, this regulation is not established according to the law and the Coordination Committee and Municipal Government are investigating in preparation to authorize its legal status.

3.5 Related Agriculture Marketing Organization/Institution

(1) Related Organization / Institution at the M/P stage in 1994

The summary of the organizations in relation to the marketing of fruits and vegetables:

1) The Central Government

The functions of MACA had been passed over to the SNAG of the Ministry of Development of Human Resources that took charge of driving the agricultural politics. Under the control of SNAG, CIAT existed and was added the function of agricultural promotion besides the investigation function that UPRA of CORDECRUZ had executed in the past years.

2) Local Governments

a) Local governments: Basically, the execution of the projects were passed over to the Municipal Governments, with the collaboration of CORDECRUZ. The Municipal Governments of Santa Cruz took charge of the construction, administration and maintenance of the Municipal Markets.

b) CORDECRUZ: This corporation took charge of elaborating the development projects from its planning to the final execution in the whole area of the Department of Santa Cruz. CORDECRUZ was limited to spread and to adjust matters of credits or international support.

3) ASOFRUT

ASOFRUT gives technical assistance such as improvement of quality, technical assistance of production and information on marketing.

(2) Related Organization/ Institution at the F/S Stage in 1998

1) Central Government

SNAG was promoted to MACA in considering the importance of production of agricultural product and its marketing.

2) Local Government

CORDECRUZ was dissolved and transferred to the Prefecture, Municipal Government and private sector based upon the decentralization policy in 1995.

3.6 Management Organization/Institution of Abasto Market

(1) Management Organization/ Institution at the M/P stage 1994 (refer to Table A.2.3-2)

- a) A municipal ordinance by the Municipal Government of Santa Cruz decided the construction site of Abasto Market in 1978, but it was not until 1983 that the construction of Abasto Market was agreed by an inter-institutional agreement between MACA and Municipal Government. The construction of the Abasto market located between the 3rd ring road and Pirai Ave. was agreed by both parties. In order to have a better operation, they agreed to have only one administration for the facilities and services for the entire market, subject to special regulations. Two buildings were constructed in 1983 by the fund of Argentina inside the Abasto Market site.
- b) In 1987, CRAMA in Santa Cruz was established as the organization in charge of the Abasto Market's management. The members of CRAMA were composed of the representatives of: Corporation of Regional Development of Santa Cruz (CORDECRUZ), MACA, FSUTCSC and ASOHFRUT.
- c) Due to the request made by CRAMA in 1990, the basic structure inside of Abasto Market was developed/funded by the Social Emergency Fund (FSE) of Bolivia, Regional Development Corporation of Santa Cruz (CORDECRUZ) and the Municipal Government.
- d) In 1990, Municipal Government in Santa Cruz approved that Cooperativa 2 de Junio to construct the building inside Abasto Market by USFURUCT system. Since then, the Farmers and Municipal Market have existed side by side legally inside Abasto Market.
- e) CRAMA's activities lasted until 1990. The actual management of the Abasto Market, stopped due to the existence of political disagreements concerning individual interests.
- f) Abasto market was operated and managed by the Municipal Government and three private organizations (FSUTCSC, ASPROA, Cooperativa 2 de Junio).

(2) Management Organization/ Institution at F/S stage in 1998 (see Table A.2.3-2)

As CRAMA was no longer active, the national law from which established it was made invalid with the introduction of the decentralization law.

1) Establishment of New Committee in the Place of CRAMA

- a) Committee of management of Abasto Market was created on July 1995 by the inter-institutional agreement of relevant organizations. However, this committee had no legal status and disappeared at the end of the same year due to the opposition of farmers'/laborers' associations.

- b) Master Plan Follow-Up Committee was established by an inter-institutional agreement in place of committee of O/M of Abasto Market in 1996. This committee also had no legal status. After that, the mentioned committee was reorganized to the new "Coordination and Follow-Up Committee of Master Plan". This committee was established by an inter-institutional agreement in November 1997. The members of this committee are composed of the representatives of Prefectural Department, Municipal Government, CAO, ASOHRUT and FSUTCSC. This committee also has no legal status.
- 2) FSUTCSC and ASPROA have split into seven associations because of poor management such as corruption and political discord. FSUTCSC does not have strong power as before and only one association is affiliated under it. The other associations belong to Central Obrera Boliviana (COB). As of 1998, there are eight users' organizations; Cooperativa 2 de Junio, Asociación 19 de Marzo, ASOPROCA, ASPROA, ACPAMA, 24 de Sept, AIPPA and ASOPROCE. Each organization manages and operates its own marketing area.
- 3) Coordination and Follow-up Committee of Master Plan

The objectives and functions of the said committee are as follows:

a) Objectives

- to take necessary measures for the implementation of the Master Plan in all various stages.
- to commit and to assure financial and human resources necessary for the implementation of the Master Plan.
- to formulate the administrative and operational procedures for the implementation of the M/P and the feasibility study and the final design for the operation system.

b) Functions

The members of the committee from the following bodies have their respective functions below:

i) Prefecture

It officiates as the counterpart-institution related to all studies and the construction of the facilities in coordination with the Municipal Government.

ii) Municipal Government

It takes responsibility for the reorganization of the Abasto Market, financing all the expenses of improvement of its infrastructure. It prepares the necessary regulation for the management and operation of the current wholesaler marketing system. It will acquire the necessary land for the construction of the new wholesale market. It will provide all the necessary information to elaborate the plan construction designs, norms, regulations and inspection of the relevant works.

iii) CAO, ASOHRUT

They support the technical teams of the prefecture and municipality in all respect to the coordination of the activities to develop different requests, financing administrations, land selection in provinces for the construction of the collection centers, technical support with personnel for emergency cases.

iv) FSUTCSC

They will support the technical teams of the prefecture and municipality and will develop and facilitate the works of the reorganization of the Abasto Market, support the legal dispositions approved by the Municipal Government. They will also instruct their associates in provinces, support the Provincial Committees in all with respect to the new marketing system, construction of collection centers, sorting and distributing products, etc.

3.7 Facilities/Infrastructure and Operation/Maintenance of Abasto Market at the F/S stage in 1998

(1) Facilities and Infrastructure (refer to Table A.2.3-2)

1) Expansion of Parking Area

The Municipal Government established the parking area for large vehicles for fruits in the neighboring land of Abasto Market. About 10 trucks/day have used this parking area. This measure has been effective in mitigating the traffic congestion of Abasto Market.

2) Facilities

In 1994, Cooperativa's building was under construction for its expansion, which was completed in 1995. Its floor area increased from 7,000 m² to 14,000 m², and the number of sections increased from 220 to 482. Most of sections have been rented to merchants such as tomato wholesalers, grocers, flower shops and snack sellers. In the Cooperativa's building, consumers have significantly increased between 1994 and 1998. There were four temporary sheds for fruits and vegetables, cereals and grocery merchants in Farmers' market area in 1994. In 1998, the number has increased to 12 sheds. In addition, many beach parasol type shops are newly introduced.

3) Infrastructure

a) Rehabilitation of Basic Infrastructure

Infrastructure has been improved based upon the M/P recommendation. The Municipal Government rehabilitated the infrastructure such as paving the unpaved area inside the market and covering drain trench outside market along internal 3rd ring road / Pirai Ave. This covered trench is useful as pedestrians and parking area of consumers and taxis. The Municipal Government invested US\$301,000 for the rehabilitation.

b) Parking Area

There were parking spaces for about 90 trucks. Now these spaces have decreased to about 50 trucks due to occupation of passage by small retailers.

c) Garbage Area

In 1994, existing garbage area was located at the south west corner of the market. In 1998, this area is occupied by banana traders' shops. Hence garbage area is divided into three spaces along the road outside the market.

4) Utilization of Facilities

Cooperativa 2 de Junio had its own building in the market and expanded in 1996. FSUTCSC and ASPROA occupied two main buildings each and utilized as selling spaces for their members in 1994. In 1998, FSUTCSC is no longer influential, and its building is taken over by 19 de Marzo, an ex-constituent of FSUTCSC.

5) Number of Shops within the Market

Approximately 1300 shops existed within entire market in 1994. In 1998, the number has increased to approximately 2300 shops. There are no more space for new merchants.

(2) Operation and Maintenance

1) Operation and Maintenance by Municipal Government

The Municipal Government is short of personnel and lacks funding for the undertakings as regards the maintenance of Abasto Market. Except for the fee system, the undertakings remain the same in 1998 as in 1994 i.e.; security control, price and weight control, control of vehicle circulation, sanitary control, mediation of conflicts and garbage collection.

Fee for entry and parking charged by the Municipal Government was non-existent in 1994 and was not found either in 1998. Fee for merchants including fruit and vegetable wholesalers, retailers and other commodity sellers was Bs.1 in 1994, which was no longer collected as of 1996, and remains as such in 1998. According to the Director of Industry and Commerce of Municipal Government, which is in charge of administration of Abasto Market, collection of annual fee from merchants is now being considered and planned.

2) Operation and Maintenance by Users

On the other hand, users' organizations operate and manage their territories. Their undertakings remain the same in 1998 as in 1994, and they are: security control, cleaning, control of vehicle parking, mediation of conflicts and maintenance.

In 1994, members of users' organizations were charged Bs.0.5 per day. As of 1998, the daily charge is Bs.0.5~1, depending upon the scale of organizations. Larger organizations tend to own better equipped facilities that demand higher cost of maintenance. Users' organizations did not charge entering trucks as of

1994, though in 1998, Bs.0.5~1 per day (larger vehicles charged more) is charged for parking fee in their territories.

3.8 Implementation of Law/Regulation of Operation and Management in Abasto Market

Law/Regulation of wholesale market has mostly been ineffective or only partially implemented in Abasto Market as shown in Table A.2.3-3. Only laws/regulations for transaction system of direct negotiation, security control, mediation of conflicts and garbage collection have been effective. Laws/regulations on collection of marketing information, operation days, price/weight control, control of entrance, circulation and parking of vehicles and sanitary control have been partially implemented. Important laws/regulations on qualification and registration of users, fee system and standardization of products have never been effective in past years.

3.9 Problems and Issues in the Marketing System of Fruits and Vegetables

(1) Handling volume of Abasto Market

In reviewing the supply and demand and the product inflow volume, there is a tendency for the ratio of imported product volume from neighboring countries and the inflow volume from outside the department to be relatively larger in comparison to the product volume supplied from within the department. Furthermore, this tendency is expected to increase rapidly following Bolivia's membership into MERCOSUR.

Approximately 90 percent of the consumption volume of Santa Cruz city is handled by Abasto Market. An efficient wholesale market capable of handling this high distribution ratio within the market does not exist.

(2) Business transactions at Abasto Market

Presently, the majority of the product that is delivered to Abasto Market is handled by traders. According to the M/P implemented in 1994, it was common practice for farmers to directly transport and sell their product at Abasto Market. However, with the enactment of the Rural Decentralization Law in 1995, the retail competitiveness of the production area farmers in Abasto Market declined, their advantage to market access also fell in correlation with rapid urbanization, and there has been an overcrowding of the market due to an increased number of informal sector businessmen (the majority are petty wholesalers). All of these factors have contributed to the retreat of marketing activities in the city by farmers. The growing mixture of wholesalers, retailers, and traders at the Abasto Market has become a severe problem and it has made efforts to raise the efficiency of wholesale operations all the more difficult.

(3) Establishing a pricing mechanism

The wholesale product price in Santa Cruz city is higher than the wholesale price in other areas in Bolivia and they are prone to extreme seasonal fluctuations. In addition, the wholesale price is much higher in Bolivia than in neighboring countries. This is due to the smaller scope of operations of product producing farms which are unable to keep up with the growing demand for increased production. With the exception of certain crops, this is also an indication of the declining self-sufficiency ratio of unviable farms. The profit

margin of wholesalers in Abasto Market is fixed and they are not subject to price fluctuations. This is due to a distortion in wholesaler competition.

(4) Burden of transport costs

The ratio of transport cost in the price of the product from the production to the consumption site is high (especially for product requiring rapid packing to maintain freshness) and rationalization of transport operations is an important issue. The transport cost per t/km successively decreases according to distance and there is a tendency for the range of long distance transports to grow in the case of product, including imported products.

(5) Countermeasures to improve international competitiveness

In addition to the production issues explained in the section on " Issues and Development Needs in Production", an organizational and legal system in the area of marketing is conspicuously lacking.

Marketing is characterized by such factors as small transactions, difficulty in securing a stable supply of product, the lack of competitive pricing, etc. Product transactions are dependent on traditional quality control techniques and various units of weight are utilized and it is essential that quality and unit of weight are standardized.

Basic knowledge of the legal and organizational aspects of product marketing by government personnel, farmers, and traders is inadequate and they have been unable to gain sufficient experience in these areas in the past. Adequate training and guidance for relevant personnel are essential to improving international competitiveness by implementing a systematic and organized system of marketing and establishing communal use of production and marketing facilities. In tandem with these guidance and training activities, a plant inspection system for imported and exported product is also needed.

(6) Socioeconomic conditions

Although the average income level of farmers engaged in product production is higher than the income of the average Bolivian citizen, the discrepancies in income between farmers are large, due to the difference in the scope of farming operations. Furthermore, the scope of operations of traders is small and the difference in the income level between farmers and traders is minimal. An important issue is rationalizing the marketing system of both the production and consumption sites by organizing small farmers and traders.

The major underlying reasons why attempts to organize farmers and traders have been unsuccessful is the farmer/trader distrust of parties responsible for managing the organization, the unclear management of the financial system, and the lack of technical knowledge on organizational management.

Farmer Incomes in the Valley Areas (1998) unit: Bs.10³

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Avg.
Small-scale	12	23	26	20	25	24	40	24
Middle-scale	17	14	54	41	63	56	31	40
Large-scale	36	37	56	73	117	52	52	69
Average	22	24	40	54	59	32	32	42

Remarks:

- 1 Obtained from the F/S survey "Socio-economic Survey" (implemented August 1998)
- 2 (1) Mairana (2) Samaipata (3) Pampa Grande (4) Comarapa (5) San Isidro (6) Saipina (7) Vallegrande
- 3 Small farms (<2.0ha), medium farms (2.0 - 5.0ha), large farms (>5.0ha)

Incomes of Farmers/Traders and Their Household Expenditures (1998) unit: Bs.

	Annual Income			Household Expenditure		
	Avg.	Min.	Max.	Avg.	Min.	Max.
1 Producer						
(1) large-scale	69,280	36,915	117,144	30,658	11,560	50,039
(2) middle-scale	39,546	13,966	63,277	15,302	9,408	22,684
(3) small-scale	24,251	12,007	40,204	12,727	6,989	26,880
2 Intermediary (Small-scale, by place of residence)						
(1) S.C. City	33,950	9,600	100,000	22,489	5,250	53,160
(2) Rural area	32,590	8,000	75,000	22,093	13,360	47,440
3 Retailer (operating in Abasto)	18,857	-	-	11,207	6,400	18,100
4 Wholesalers (operating for side-business in Abasto)	18,800	-	-	15,456	10,560	22,160

Remarks:

- 1 Obtained from the F/S survey "Socio-economic Survey" (implemented August 1998)
- 2 The figures for annual income/expenditure each indicate the average, maximum, and minimum value for each target group

g) Legal system and operations of the Abasto Market

The Abasto Market is a regional city market (public market) and farmers' market established in accordance with the Santa Cruz municipal ordinance based on the MACA law. Integrating these two dissimilar types of market into one entity has created confusion legally and operationally. An attempt to draw up a legal system to administer market operations was carried out several times in the past, but it was never implemented. Moreover, CRAMA, the ineffective the operating committee overseeing Abasto Market, inevitably lapsed following the enactment of the Rural Decentralization Law. As a result, the Abasto Market has continued to exist as an unregulated and segmented market operating according to the interests of various user groups.

4 DEVELOPMENT PLAN OF THE NEW WHOLESALE MARKET AND ABASTO MARKET

4.1 Site Selection of the New Wholesale Market

The methodology (criteria ranking methods) which identifies the character of each project site by the several criteria is adopted to select only one site for the New Wholesale Market.

4.1.1 Area Selection

(1) Possible Project Sites

1) Proposed Project Site by City Government in the M/P 1994

Regarding the proposed project site by the City Government for the New Wholesale Market (13km south-west of city center, along Route 4) in 1994, one private developer has started the land preparation works for their housing project including a farmers market for fruits and vegetables since July, 1998.

2) Proposed Project Site by City Planning Section of City Government in 1998

At the middle of August 1998, City Planning Section (Consejo de Plan Regulador) of City Government proposed the City Block UV 189 (residential area : 8km south-west of city center) as the only one possible site for the project.

3) Possible Proposed Site

As above, total 2 sites shown as follows were decided to be evaluate as the project site alternatives for the New Wholesale Market in the Phase 1 Study.

Proposed Site No. 1 : Santa Cruz City block UV 189 (residential area) that faces both Route 4 and the south-west city boundary (8km south-west of city center)

Proposed Site No. 2 : Site in La Guardia City (proposed site in the Master Plan 1995 : 13km south-west of Santa Cruz city center, along Route 4)

Locations of these 2 proposed sites are shown in Fig. A.2.4-1. Total land area, conditions of land surface/infrastructure, surrounding conditions of these 2 alternatives are shown in Table A.2.4-1.

(2) Site selection Criteria and Evaluation

12 criteria items (including several sub-criteria items) shown as follows were prepared for the site selection.

1) Position of the new wholesale market development :

Position of each project alternative site will be identified in the framework of the regional development plans as follows.

i) Santa Cruz City's PDM

- ii) Santa Cruz Prefecture's PDM
 - iii) Santa Cruz Prefecture's Guideline of Metropolitan Development Plan
- 2) Accessibility for products suppliers :
- Accessibility from the main incoming routes, i.e. Route 4 west (Valley Area), Route 7 & Route 9 north (San Juan / low land area), Route 4 west (Cochabamba), Route 4 east (Cotoca region) and Route 9 south & 6 (Argentine/Paraguay) are evaluated in sub-criteria from the products supplier's viewpoint, and accessibility to the rail road network for Brazil is also selected for sub-criteria.
- 3) Accessibility for Users of the Wholesale Market in Consumption Area (for city dwelling dealer and retailer in Santa Cruz) :
- Proximity to Santa Cruz, accessibility from the public traffic system for the city dwelling user have to be evaluated in sub-criteria.
- 4) Management Ability of Facilities Maintenance of City Government :
- Study Team determined to evaluate the management ability of a municipal government as a maintenance institution to which the project site belongs, because there is high possibility for the maintenance method by the Metropolitan Committee such as CRAMA not to function in the wholesale market.
- Therefore financial ability, organization and its human resources stock, and experience of the similar projects of the municipal government are evaluated in sub-criteria.
- 5) Management Ability of Users' Organization :
- Ability of the operation organization will depend upon its dominant members. Accordingly its coordination/organization ability, financial and management ability have to be evaluated in sub-criteria by anticipating the dominant members (farmers association, private company, large scale dealers, super-market association, etc.).
- It is necessary to consider the following item concretely.
- In case of UV189, large scale dealers and super-market association will supposedly join the operation as the dominant members in addition to the qualified wholesalers selected from those who are using the existing Abasto Market.
 - In case of Site in La Guardia City, small scale farmers will be the dominant members, and organize the management.
- 6) Sustainability :
- Instability and/or difficulties in the coordination for the relationship between municipal government, users' organization and users are evaluated in sub-criteria.
 - Sustainability that consists in the experiences of maintenance institution is evaluated.

- 7) Site Condition :
- Infrastructure's conditions including public utilities in each project site are evaluated in sub-criteria.
- 8) Land Acquisition, etc. :
- Difficulties of land acquisition, necessity of large scale land preparation and necessity of preparation works for infrastructure are evaluated in sub-criteria.
- It is necessary to consider the following items.
- In case of the city block UV189, it's necessary to consider that municipal government have to take the initiative to expropriate the private lands, prepare the necessary budget, and change the designated city planning zone from the residential area to the suitable area for the wholesale market.
- 9) Linkage with related projects :
- It is necessary to evaluated the Presence/influence of the linkage with other private projects concerned with agri-products marketing.
 - In case of UV189 and Site in La Guardia City, it is necessary to consider the linkage with other private projects to keep their competitive marketing conditions by reducing the monopolistic control by private sector.
- 10) Environmental Impact Assessment :
- It is necessary to consider the future conditions of both the existing Abasto Market and the New Wholesale Market.
- a) Social impact
- Social impacts to the related persons have to be evaluated in sub-criteria. Main related persons are anticipated as follows.
- Persons in production area: small scale farmers, women engaged in small scale transportation, large scale farmers, Japanese-Bolivian farmers in San Juan, transporters, intermediates
 - Persons in consumption area: dealers, import/export dealers, intermediates, retailers, consumers, neighboring inhabitants
- b) Environmental Impact :
- Impacts of noise pollution, air pollution, water pollution, soil pollution and garbage/dust problems are evaluated in sub-criteria.
- 11) Project Evaluation
- For the project evaluation, it is necessary to carry out the rough study of economic/financial reliabilities and income re-distribution among beneficiaries who belong to management organization and users. "Management organization" means municipal government, and "users" means operation cooperatives, transporter syndicates.
- In case of Abasto Market Site and UV189, public fund will be invested for the facilities.

12) Effective Technology Transfer :

It is necessary to evaluate whether the technology transfer to the related persons shown in criteria-10 (without neighboring inhabitants) will be done effectively or not. It depends on the site location and the participants (users of facilities).

(3) Priority of Proposed Project Site

The results of priority ranking for the each sites are shown from Table A.2.4-2 to Table A.2.4-3.

1) General characteristics

The result of "Position of the new wholesale market development" shows that Site in La Guardia City got the high score, and it reflect the fact that there is no position of the New Wholesale Market in the PDM of Santa Cruz City and Prefecture, but only the Guideline of Metropolitan Development Plan emphasizes the necessity of strong relationship between Santa Cruz and La Guardia.

In the result of "Accessibility for products suppliers", both UV189 and Site in La Guardia City got the high score jointly.

The result of "Accessibility for users of the wholesale market in consumption area" shows that Site in La Guardia City has low accessibility because of its non proximity to users in Santa Cruz City.

The result of "Management ability of facilities maintenance of City Government" shows the extreme low ability of La Guardia City where the project site locates in, and it reflects the deference of local government scale between Santa Cruz City and La Guardia City.

The result of "Management ability of users' organization" shows the large difference in the score. It reflect the facts as follows,

- In case of UV189, various members who has enough abilities for the operation work will be selected to the member of organization.

In the result of "Sustainability", score of Site in La Guardia City is low. It reflects the operation body's instability in Site in La Guardia City.

In the result of "Site Condition", there is no difference in both 2 site because they are equipped with almost all of the infrastructure except the sewage system.

In the result of "Land Acquisition" Site in La Guardia City show the extremely high score. It reflects the easiness of land acquisition in the Site in La Guardia City, and difficulties of another's.

In the result of "Linkage with related projects", both site show the high score jointly because careful coordination with the private sectors' projects are required.

In the result of "Environmental Impact Assessment", both 2 sites show consistently middle-high scores.

In the result of "Project evaluation", the score of UV189 is slightly higher than another because of its comparative high scores in both economic reliability and income re-distribution.

In the result of "Effective Technology Transfer", Site in La Guardia City shows extremely low score because of its non proximity for the related persons who are mainly dwellers of Santa Cruz City, as was expected.

2) Project site that can be recommended

Taking the ranking of each site in the criteria into consideration, and paying attention especially to "Accessibility for users", "Management ability of city government and user's organization", and "Sustainability", Santa Cruz City Block UV189 was supposedly the site that can be recommended.

4.1.2 Decision of the Site for the New Wholesale Market

On the official meeting on October 30, 1998 in the Phase 2 Study, Plan Regulador showed 2 alternative sites in UV189 of Santa Cruz City (Site A and Site B shown below) as the possible sites for New Wholesale Market. At first, Study Team recommended Site A to Department of Sustainable Development (herein after DSD) because Site A is facing directly to Route 4 therefore it's very convenient for users, but DSD hoped to choose Site B because of mainly the predicted traffic confusion on Route 4 in case of Site A. Therefore DSD, Plan Regulador and JICA Study Team discussed this matter intensively, and reached to a conclusion that Site B was preferable. But after this confirmation by 3 parties, the site was changed from Site B to Site C just before the establishment of ordinance by Santa Cruz City Council on December 8, 1998.

All of the alternative sites mentioned here are neighboring each other, and located 8 km south-west of Santa Cruz city center, near Route 4 (Corretera Antigua a Cochabamba). General characteristics of these site alternatives are shown below (refer to Fig. A.2.4-2 and Table A.2.4-4).

Site A: This site is facing directly to Route 4, located on the northern side of this main road (UV189). Total land area is approx. 13.5 ha. There are many existing facilities (restaurant, small shops, automobile-workshop, high-grade country style residences, cereal silo, and wooden material storage, etc.) in this alternative.

Site B: This site is located approx. 400 m south-east of Route 4, next to the International School of Santa Cruz (UV189). It has private access road from Route 4, and is facing a projected branch road from Route 4. Its total land area is approx. 9 ha. Several row-grade residences, brick factory, shop, chicken farm facilities lie scattered.

Site C: Site C is located approx. 1.4 km south-east of Route 4 (ZAPU District-10, next to UV189). It has private access road from Route 4, and is facing a projected branch road from Route 4. Total land area is approx. 10.7 ha. Almost all land surface is covered by grass, it has also some undulation and height place in western end. This site is used for farm land partially, and small brick maker's facilities also exists in the site. At the north-western boundary there is land level difference of approx.1.5 m.

The outline of the process of site determination for the new wholesale market is shown as follows.

- Oct. 30, 1998 DSD and Study Team requested the representative of City Mayor to authorize the project site of new wholesale market. On the other hand, Plan Regulador showed/explained that they had 2 alternative sites (Site A and Site B) in UV189. Representative of city mayor agreed on the authorization of the project site, and referred the necessities of establishment of ordinance for change in land use and land expropriation in the project site. On this day Prefect of Santa Cruz and Santa Cruz City Mayor approved officially that feasibility study for the new wholesale market is to be conducted in UV189 of Santa Cruz as a part of minutes of meeting on the interim report for this study.
- Nov. 10, 1998 DSD and Study Team requested President of City Council to make arrangement of the legal procedure (change in land use or land expropriation) for the topographic, boring/soil, and water survey in the project sites. President of City Council requested DSD and Study Team the formal documents about specific site locations and recommendation on which site is preferred. At this time, Study Team had opinion that Site A is best place for new wholesale market because it is facing directly to Route 4 therefore it's very convenient for market operation and for the user.
- Nov. 11, 1998 DSD sent a formal recommendation letter to the President of City Council. In this letter, Site B was recommended.
- Nov. 17, 1998 DSD requested Mayor Works Section of City Government specific data of Route 4's reform works and about on which project site is preferred considering the future traffic condition on Route 4.
- Nov. 23, 1998 DSD received formal letter from Public Work Section of City Government. This letter said Site B is preferable.
- Nov. 25, 1998 Plan Regulador, DSD and JICA Study Team confirmed that Site B is more preferable than Site A for the new wholesale market because of the predicted traffic jam caused by the high tonnage truck flow into/out of the site, and the illegal land occupation by street vendors around the site, and inflow of the waste water from new wholesale market to the drainage ditch along route 4 in case of Site A. On the other hand, DSD, Plan Regulador, and Study Team confirmed also that it's necessary to construct the access road from Route 4 to the site by Bolivian side in case of Site B. Plan Regulador and DSD understood that it was necessary and urgent to obtain an Ordinance from City Council to initiate the legal procedure for land expropriation in order for the Study to proceed.
- Nov. 27, 1998 DSD and Study Team requested President and Market Commission of City Council for early authorization of Site B and establishment of necessary ordinances.
- Nov. 30, 1998 DSD and Study Team requested Urban Planning Commission of City Council for early authorization of site B and establishment of necessary ordinances.

- Dec. 1, 1998 JICA Santa Cruz Branch Office and Study Team strongly requested Prefect of Santa Cruz to make adequate arrangement for site's authorization and ordinance establishment. Prefect requested City Mayor and President of City Council for early site's authorization and ordinance establishment.
- Dec. 2, 1998 City Council confirmed that necessary legal procedure by City Mayor for the agreement between DSD and JICA S/W mission on December 4, 1997 was not finished. Therefore City Council could not carry out site authorization establishment on this day.
- Dec. 3, 1998 DSD, Plan Regulador and City Mayor's Advisor requested Study Team to accept new site C as a site for new wholesale market considering predicted difficulties of land expropriation in Site B. Study Team agreed this request on the condition that city government construct the projected branch road from Route 4 and Ring Road 8th.
- Dec. 4, 1998 City Council authorized site C as a site of new wholesale market. But regarding its detailed specific location, they entrusted Plan Regulador with its reconfirmation/making final determination by Dec. 8, 1998.
- Dec. 5, 1998 Plan Regulador confirmed that Site C is not located in UV189 but in ZAPU District-10, and made final decision that it was the site for the New Wholesale Market.
- Dec. 7, 1998 Plan Regulador informed their above mentioned determination to DSD and City Council. Receiving this information, City Council amended the location of site for new wholesale market, and they started the preparation for ordinance.
- Dec 8, 1998 City Council established the ordinance about the land expropriation and change in land use for Site C as a site for the new wholesale market.

It took much efforts and time for these processes mentioned above, and at first Prefecture Government and City Government seemed to be opposed each other. But at the end of these processes, it seemed that Prefecture Government, City Government and City Council have gotten good relationship for this matter.

The site for the new wholesale market approved by Bolivian side as a part of minutes of meeting on the interim report for this study was UV189 of Santa Cruz City. Therefore it was necessary to clarify on the minutes of meeting on the progress report 2 that the site of new wholesale market was changed from UV189 to ZAPU (next to UV189).

4.2 Outline of Development Plan of the New Wholesale Market

4.2.1 Basic Concept of Development

(1) Objective

The existing Abasto Market is composed of farmers' market and municipal market (public retail market), each with different historical background and has both wholesale and retail functions. The management/operation of Abasto Market is extremely complicated as several management/operation organizations are involved.

The objectives of development of the new wholesale market are to separate wholesale and retail functions, to set up a regulated management/operation organization and to formulate an efficient wholesale function by issuing proper rules/regulations on the management/operation of the market.

(2) Development Concept

The new wholesale market connecting production areas inside Santa Cruz Department and supply area outside the department to the consumption area inside the department with its center in Santa Cruz City is to be developed. This wholesale market should be efficient and fair for all users. The project based upon the following developing plan should be built up in order to realize this development target.

- 1) Commercialization of fruits and vegetables to meet the needs of consumers (Handling fruits and vegetables with proper quality standard from wide areas).
- 2) Enhancement of efficient wholesale function and benefit for many users in the market by separation of wholesale and retail functions.
- 3) Grading up of wholesale function due to quality improvement of fruits and vegetables.
- 4) Qualification of wholesalers and equalization of participation opportunity.
- 5) Formalization of informal sector users in existing Abasto Market (issue of license).
- 6) Development of law/regulation in the possible range.
- 7) Consensus building between the Prefecture and Municipal Government.

4.2.2 Supply/Demand Balance of Fruits and Vegetables

(1) Basis of estimation

Calculation of population is necessary in estimating demand volume. The rate of population increase in the Department of Santa Cruz is currently 3.15% per year. Estimated departmental population based upon the assumption that this rate will maintain is; 1,813,029 in the year 2000, 2,052,492 in 2005 and 2,396,778 in 2010. If annual per capita consumption of fruit and vegetables is maintained at 314kg as the last survey, then the demand of fruits and vegetables will be 569×10^3 t in 2000, 644×10^3 t in 2005 and 752×10^3 t in 2010. The total departmental demand is estimated to increase by 150% from the current demand.

The rates of population increase in the Province of A. Ivanez and the City of Santa Cruz have been estimated higher than that of the Department, 4.36% (1996) and 4.32% (1997) respectively. The rate of population increase is assumed at; 4.30% until 2000, 4.0% between 2001 and 2005 and 3.5% between 2006 and 2010. The estimation is summarized in Table A.2.4-5. The population of the City of Santa Cruz will be 1,438,979 in 2010 while the demand of fruits and vegetables will be 451×10^3 t. This is 157% increase from the current demand volume.

The supply quantity of fruits and vegetables from the Valley areas will stay at the present level until 2000. However, it is assumed to increase gradually along with the construction

of irrigation facilities, to $127 \times 10^3 \text{ t}$ (1.53% annual increase) in 2005 and $145 \times 10^3 \text{ t}$ (2.36% annual increase) in 2010. Fruits will be the major contribution to the increment.

The future tendency of supply volume from the lowland area is not easily foreseen because the major portion of cultivated land in the area is currently utilized for large-scale farming of cane, soybean, rice and corn. Besides industrial crops, a lot of cassava (yuca) and plantain are planted as crops of traditional food. Very little land is currently used for fruits and vegetables such as tomato and citrus production. From the past statistics, plantain production is not increasing but steady while yuca production is slightly growing. The Japanese colony in San Juan intends to increase citrus production as one of alternative cash crops. As the Colony does not have a plan to expand irrigation as is the case with the Valley areas, production increase is estimated lower. The estimated figures are; $362 \times 10^3 \text{ t}$ for 2000 maintaining the current rate, $380 \times 10^3 \text{ t}$ (5% increase) for 2005 and $418 \times 10^3 \text{ t}$ (10% increase) for 2010.

Approximate volume of import is $10 \times 10^3 \text{ t}$ per year and mostly comprised of potatoes from Argentina and some apples from Chile. The quantity is estimated to increase gradually from the year 2000.

(2) Supply and Demand

The supply and demand trend of fruits and vegetables in the Department of Santa Cruz is summarized as Tables A.2.4-6, 7, and 8. The inflow volume of fruits and vegetables to the City of Santa Cruz will increase gradually.

4.2.3 Origin/Destination of Fruits and Vegetables

Presumably, the increased production of fruits and vegetables is to be consumed mainly within the Department and the City of Santa Cruz. But a fairly large portion of the products produced in the lowland such as yuca and plantain may need to seek market outside the Department.

Nevertheless, the inflow volume from outside the Department to the City of Santa Cruz will increase rapidly. Total marketing volume within the Department is estimated to increase to $666 \times 10^3 \text{ t}$ by 2000, $703 \times 10^3 \text{ t}$ by 2005 and $802 \times 10^3 \text{ t}$ by 2010 from the current $617 \times 10^3 \text{ t}$. This means that the City will occupy a very important position for the fruit and vegetable trade. The estimation is shown in Tables A.2.4-9, 10 and 11.

4.2.4 Scale and Functions of the New Wholesale Market

(1) New Marketing System of the New Wholesale Market

New marketing system of fruits and vegetables is as shown in Figure A.2.4-3 and 4.

The wholesale function will be separated from the existing Abasto Market in Santa Cruz, and a new wholesale market is to be established. The existing Abasto Market will be renewed as a retail market. The producers in the Valley areas will be qualified to be wholesalers in the new wholesale market by forming cooperatives to collect and transport products through collection and distribution centers to the new wholesale market. Collection and distribution of products from the Valley areas will be implemented through 7 collection/distribution centers, and farmers' organizations using these centers will be able to secure sales lots as wholesalers in the new wholesale market.

Along with such improvement of the traditional marketing system, new target groups that were formerly non-users of existing Abasto Market is taken into consideration as wholesalers. Amongst these new target groups, agricultural cooperatives in lowlands (CAISY and CAICO) and a supermarket association have expressed their willingness to participate as wholesaler in the new wholesale market. The use of new wholesale market and collection/distribution system, and technology transfer through market operation will support production area development. It contributes to establishing an internationally competitive fruit and vegetable marketing system including product quality improvement for MERCOSUR participation of Bolivia. Individuals or groups of small-scale producers will also gain an opportunity to sell their products to consumers.

(2) Projection of Marketing Volume through the New Wholesale Market and Existing Abasto Market

Assumptions

- Ten percent of total marketing volume remains to bypass the new wholesale market and Abasto Market and directly distributed to other markets
- Products marketed from outside department of Santa Cruz to Santa Cruz City are transported into the new wholesale market in principle
- The remaining volume is divided in the new wholesale market and Abasto Market by the share of inflow volume from valley and lowland area in principle.

Of the total volume of fruits and vegetables currently traded in Abasto Market, 61% is traded as wholesale products, out of which 52% is traded by wholesalers, 9% through farmers' direct sales. Thus the remaining 39% retailed by wholesalers, retailers and farmers are planned to be traded as the retail portion in the existing Abasto Market after the establishment of the new wholesale market. The volume transferred to the new wholesale market and the retailed volume remained in the existing market will be maintained thereafter.

However, wholesalers in NWM will be composed of not only wholesalers transferred from the existing Abasto Market but also newly participating wholesalers such as small and large scale farmers organizations and supermarket association. Subsequently, handled volume of fruits and vegetables by wholesalers will increase from the existing 61% to 70% in future with the transfer of wholesale function from Abasto Market to NWM .

Marketing volumes through the NWM and Abasto retail market in 2000, 2005 and 2010 are shown in Figures A.2.4-5 ~ A.2.4-7 and Table A.2.4-12. According to these figures and table, marketing volumes through the NWM are estimated to be 205×10^3 , 239×10^3 , and 284×10^3 t/year in 2000, 2005 and 2010 respectively. Marketing volumes of major products by origin through the NWM, Abasto Market and other markets in 2005 and 2010 were estimated. The results of estimation are as shown in Tables A.2.4-13 ~A.2.4-16.

On the other hand, products handled in Abasto Market will amount to a total of 103×10^3 t/year in 2005 and 122×10^3 t/year in 2010 that are directly transported from the Valley areas, Lowland and outside the Department. These volumes compare to 50% of the total inflow volume in the new wholesale market. Of the total inflow to Abasto retail market, 40% will be shipped from Lowland and 35% from outside the Department, and none from other countries. The Valley areas-origin products will make 25% of the total inflow volume.

Destination and volume of the outgoing products from the new wholesale market are as shown in Figure A.2.4-8. About 60% of the handling volume in the new wholesale market will be transported to Abasto retail market and 35% to other markets. 3% out of the remaining will be sold to big consumers/supermarkets and 1% will be exported to outside the Department.

4.2.5 Marketing Information System

(1) Objective

The objective of establishing the information system is to collect and provide marketing information in the new wholesale market for producers through collection and distribution centers or other channels.

(2) Outline of Marketing Information System

Contents of marketing information: The following marketing information/data to be collected and processed.

- 1) Minimum and maximum prices by product and by grade
- 2) Quantity information (Origin and quantity marketed)
- 3) Price and quantity marketed trend

(3) Destination of Sending Information

- 1) Collection/distribution centers in production areas within the Dept. of Santa Cruz
- 2) Individual producers, producers associations inside/outside the Dept. of Santa Cruz
- 3) Wholesalers inside the market

(4) Transmission Mode

Internet, fax, telephone, publication via bulletin board and mass media (TV, radio, newspaper).

(5) Data Compiling and Processing Method

Computer system will be introduced. Market information system is shown in Figure A.2.4-9.

4.2.6 Willingness and Qualification of Participants in the New Wholesale Market

(1) Willingness

Among eight users' organizations in Abasto Market, Cooperativa 2 de Junio and Asociación 19 de Marzo are two big organizations. And most of wholesalers are members of these organizations. The Study Team conducted interviews with the presidents of Cooperativa 2 de Junio and Asociación 19 de Marzo in order to get information on the willingness of their members to move from Abasto Market to the proposed new wholesale

market. Also, the Study Team implemented a questionnaire survey with wholesalers on marketing of fruits and vegetables and willingness to participate in the new wholesale market.

The results of the interviews are as follows.

1) Interview with the Presidents of Users' Organizations

a) Vice president of Cooperativa 2 de Junio

Cooperativa 2 de Junio had a plan to establish a new wholesale market at Km9 along the old road from Santa Cruz to Cochabamba. This plan has not been approved by the Municipal Government of La Guardia as it contests the existing farmers' market plan by a private developer. The members of Cooperativa are much interested in the new wholesale market project and intend to participate under the condition that it is managed and controlled by systematic rules.

b) President of Asociación 19 de Marzo

The president showed much interest in the project of the new wholesale market and mentioned likelihood of some members' participation as a group (association).

2) Interview with Wholesalers

198 wholesalers out of the total 264 (75%) in Abasto and Mutualista Markets expressed their willingness to move to the new wholesale market.

(2) Estimation of Qualified Participants in the New Wholesale Market

Qualified participants in the new wholesale market were examined by using selection criteria and financial conditions of wholesalers including income statement and break-even point in wholesaling.

1) Preliminary Estimation of Qualified Participants by Selection Criteria

a) Preparation of Criteria for Selection

Selection criteria include scale of trading, financial capacity, experience of wholesale activity, management capability, and intention to move. Preliminary estimation on the qualifying numbers for participation are as follows.

- Traded volume: more than 10t/week (average trading volume of wholesalers in Abasto Market)
- Sales amount: more than US\$10,000/month (potato price Bs.16/@=10kg)
- Scale of business: sales to general consumers below 40% of total trade
- Mode of payment: cash
- Willingness to move: yes

b) Result of Preliminary Estimation

67 wholesalers out of 264 (25%) were qualified by the above criteria. Their total trading volume will be 1,578t/week. This volume corresponds to half the

total incoming volume (3,200t/week) in the existing Abasto Market (Table A.2.4-17).

Promoting the understanding of the project concept for those who were initially not disposed to participate has resulted in increasing the number of qualified persons to 88 (33%), also expanding the trading volume to 2,058t/week (equals to 64% of the total incoming volume in the existing Abasto Market) as shown in Table A.2.4-17.

In addition, the following wholesalers expressed their intention to participate during Phase II Study.

- Farmers' associations of collection and distribution centers in the Valley areas and Lowland.
- Big-scale farmers' associations in the Lowland area such as CAISY and CAICO
- Supermarket Association
- Other new wholesalers

2) Estimation of Qualified Participants by Financial Viability

Income statements regarding major products of existing wholesalers with over 10t/week of trading volume are estimated as in Table A.2.4-18. The results of estimation were summarized as below.

Unit: Bs/year					
Item	Potato	Tomato	Onion	Banana	Citrus fruits
Gross income	46,800	63,960	67,600	23,400	13,680
Net income (w/o tax)	26,330	47,205	47,130	16,346	3,256

According to socio-economic survey, which was implemented during Phase I Study, average income of small- and medium-scale producers is Bs.24,251/year and Bs.39,454/year. Income of a wholesaler with trading volume over 10t/week (potato) is Bs.26,330/year and almost the same as that of a small-scale producer. As for tomato and onion wholesalers, income is Bs.47,205/year and Bs.47,130/year respectively and 18% more than that of medium-scale producers.

Regarding wholesalers of banana and citrus fruits, their annual income is less than that of small-scale producers; Bs.16,346 and Bs.3,256 respectively. Banana and citrus fruit wholesalers do not own shops in existing buildings. Their trading space is temporary sheds and they are not responsible for sales section rental fee or operation/maintenance cost of the buildings. To own a sales lot in a building costs Bs.4,154/year while banana and citrus fruit wholesalers are paying Bs.365/year (Bs.1/day). As the figures in the above table assumes that the full rental and maintenance fee is paid, with the difference considered, the banana and citrus fruit wholesaler's income turns out to be Bs.22,165/year and Bs.7,045/year.

However, when banana and citrus fruit wholesalers join the new wholesale market, they will have to bear the rental fee and operation/maintenance cost as well as secure living expenses. As such, the selection criterion for the trading volume should be revised. For qualifying the wholesalers of bananas and citrus fruits, the minimum handling volume may be raised to 15t/week and 40t/week respectively. Currently, no individual citrus fruit wholesaler with more than 10t/week trading volume is identified, yet CAISY, whose production volume is over 3,000t/year, intends to launch citrus fruit wholesaling in the new market.

3) Break-even Point of Wholesale

The break-even point of major product wholesaling are estimated as in Table A.2.4-19. According to this table, the break-even point of potato wholesaling is 1.5t/week, tomato, onion and banana 1.0t/week, and citrus fruits 0.5t/week. Wholesalers often have other sources of income and thus these figures are sufficient for living.

4.2.7 Process of transfer from the existing Abasto Market and new participation in the NWM

The following explains the process in which wholesalers transfer to the NWM from the existing Abasto Market and new applicants' qualification and participation.

(1) Stage 1

A body organized by the Prefecture and Municipal including representatives of users for implementing the Project is to be established. Qualified wholesalers will be selected from among wholesalers of the existing Abasto Market by fair screening.

- Establishing consensus on transfer: Through discussion with qualified wholesalers on the method of transfer, the location and number of wholesaling sections to be rented by each wholesaler will be decided.
- Promotion of transfer: It is most desirable to have all qualified wholesalers to transfer at the same time. Nonetheless, there will be different timeframes for each wholesaler's closing of wholesale business in Abasto Market and opening of the new section in NWM, along with which piecemeal transfer will be carried out. For pioneering traders who decided to move in earlier stages, favourable treatment will be granted in the NWM (waiving first 6 months' rental fee for the wholesalers' section, supporting access to financial schemes in funding the relocation) to help easy transfer.

(2) Stage 2

Qualifying small-scale traders and producers using Abasto Market: Training will be given to traders and producers who may not qualify as individual entrepreneurs to enable them to group themselves for gaining qualification. Especially small-scale traders (mostly female) will be trained on organizing themselves (not simply organization establishment, but includes development of management body run by several co-managers all of whom are expected to improve their individual income from the present level). The organizations qualified after this training will be guided on transfer to the NWM wholesalers' section.

The above favorable treatment (exemption of the first 6 months' rent, free training, etc.) will be applied.

(3) Stage 3

Qualifying producers of the Valley areas: On the condition that producers use C/D centers being the core of the Project in the production site, or that they form their own organization for cooperative collection and distribution instead, training necessary for the qualification of wholesalers to the representative of such a group will be available. The favourable treatment will also be applicable in this case.

(4) Stage 4

Lowland agricultural cooperatives and wholesale section of supermarkets, who did not find advantage in wholesaling in Abasto Market due to substantial impediments over market management and market use, will have access to wholesalers' section use for possible modernization of marketing and rationalization of management.

4.3 Outline of Development Plan of the Abasto Market

Existing Abasto Market should be changed to a retail market gradually in stage-wise approach.

(1) Basic Plan for changing to a retail market

Rules/ regulations of the market should be instituted and management and operation system should be established with the consensus of retailers in the market and farmers/ intermediaries who will directly sell to consumers. After transfer of wholesalers from ex-Abasto Market to NWM, the areas and facilities occupied and used by these wholesalers should be utilized for small scale retailers and farmers.

(2) Handling volume in the Market

Handling volume in 2000, 2005 and 2010 for ex- Abasto Market (changed to Abasto Retail Market) are shown in Table 3-15. According to this Table 3-15, volume of product transported into the market by farmers and intermediaries will be 88×10^3 t, 103×10^3 t, and 122×10^3 t in 2000, 2005 and 2010 respectively.

Sixty percent of handling volume in NWM will be transported to the Abasto Retail Market as shown in Fig. 3-8. Final traded volume in the Abasto Retail Market will then be 242×10^3 t, and 287×10^3 t in 2005 and 2010 respectively.

(3) Promotion of efficient utilization of the market

Vehicle circulating route and lay out of sales sections shall be changed and rearranged; sales on the road inside the market shall be prohibited and these sales shall be transferred to space inside the facilities of the market. This rearrangement of sales areas will include securing the space for farmers who will directly sell to consumers and for selling fruits and vegetables that are unable to be sold out in NWM (see Fig. A.2.4-10).

(4) Access to marketing information from NWM

Retailers and farmers in the Abasto Retail Market will be able to properly obtain wholesale marketing information (price and volume) through the marketing information section of

the Management Body of NWM. Other farmers will be able to get some informations through the Management Body of C/D centers.

4.4 Operation and Management Plan

4.4.1 Implementation Scheme of Related Organizations

(1) Implementation Scheme of the Target Projects

1) National Level Coordination

The Ministry of Agriculture, Cattle and Rural Development will be responsible for monitoring the preparation, construction and management of Project (establishment of C/D centers, NWM and improvement of existing Abasto Market), as well as coordination among relevant agencies for fund arrangement and technical assistance.

2) Regional Level Coordination

Concerning the construction and management of the Project, the "Mixed Board" is to be established, comprised of representatives of the Prefecture of Santa Cruz, Municipal of Santa Cruz, 7 municipalities of the Valley areas, and 7 users' organizations in Abasto Market. This body carries out establishment of implementation system and relevant rules/ regulations for construction and management, as well as training, request for technical assistance and financial arrangement in pursuit of efficient and effective project implementation. Also, the Board is to supervise the Project throughout the term of construction and management.

The Mixed Board will contain two project offices within its organization, which primarily undertakes forming annual implementation plan, human resource management, budget allocation, supervising expenditure, along with supporting activities for project management of each site. The two project offices are; one for C/D center management (Project Office No.1), and the other for the NWM and Abasto Market (Project Office No.2) (refer to Fig. A.2.4-11).

a) Project Office No.1

In production area, sub-project office will be set-up in San Isidro under Project Office No.1. Steering Committees will be organized in major production areas under this sub-project office. Technology developed by the Pilot Project on management/ operation shall be transferred to the C/D centers established in each site.

Functions of the Project Office No.1 are as follows:

- Support for the formulation of development plans of C/D center in each municipality.
- Support for the provision of development funds of C/D center.
- Establishment of Steering Committee and preparation of rules/ regulations for the committee.

- Support for the establishment of Management Body, preparation of rules/regulations for the Management Body and management/ operation, method of management and operation/ maintenance.
- Formulation of annual project plan.
- Preparation of annual budget plan and supervision of execution of budget.
- Formulation and implementation of educational program for organization and development of technology.

b) Project Office No.2

Project Office No.2 shall prepare the necessary draft of municipal ordinance/ resolution for Management Committee, Management Body and management/ operation of the markets (NWM and Abasto Retail Market).

This draft municipal ordinance/ resolution shall be enacted through the examination by the Municipal Council. NWM and Abasto Retail Market shall be managed and operated based upon this ordinance/ resolution.

Functions of the Project Office No.2 are as follows:

NWM

- Establishment of Management Committee
- Preparation and implementation of rules/ regulations for the Management Committee and the Management Body
- Preparation and implementation of rules/ regulations for management and operation/ maintenance
- Preparation of criteria for qualification of wholesalers and promotion of their movement from ex-Abasto Market to NWM
- Formulation and implementation of annual project plan
- Preparation of annual budget plan and supervision of execution of budget
- Formulation and implementation of training and technical assistance program; content of training and technical assistance shall be marketing system (transaction system in the NWM), law/ regulations (wholesale market law prescribed by municipal ordinance/ resolution) and rules/ regulations of management and operation/ maintenance.
- Land acquisition
- Land preparation
- Confirmation of users for wholesale sections; the facilities and equipment in NWM should be constructed and provided stage wise in accordance with the number of qualified wholesalers and their transfer schedules. Therefore, confirmation of participants should be done at the design stage of NWM. Stage wise construction of the facilities and provision of the equipment are as follows.
 - Phase 1 Project
 - Administration building for management and operation/ maintenance, technology transfer and marketing information system, and a portion of the market facilities and equipment shall be constructed or provided.

- Phase 2 Project

Construction and provision of the remaining facilities and equipment shall be done in phase 2.

Abasto Retail Market

- Establishment of Management Committee
- Preparation and implementation of rules/ regulations for the Management Committee and the Management Body
- Preparation and implementation of rules/ regulations for management and operation/ maintenance
- Formulation of rearrangement plan of sales sections in the Abasto Retail Market
- Formulation of environmental development plan in surrounding areas of the Abasto Retail Market; entering of large trucks and sales on the road and in surrounding areas shall be regulated
- Publication of marketing information
- Formulation and implementation of annual project plan
- Preparation of annual budget plan and supervision of execution of budget
- Formulation and implementation of training and technical assistance program

(2) Institutional Assistance with Training and Technology Transfer

The result obtained from PCM workshops, Demonstration and Study Tour conducted in Phase II was that producer's willingness was cultivated for voluntary participation in the project. Still more, the producers have become inclined to spontaneously act in correspondence to transformation of fruit and vegetable marketing system. The results of these three methods conducted for the purpose of instructing producers are given prominent recognition, and the following institutional arrangements are suggested in respect to training and technology transfer to ensue.

Top-down training or technology transfer will not be applied, instead, it is intended that producers and traders themselves take part in the target project and pursue outcome of training and technology assistance through actual activities of marketing improvement.

- 1) Process 1: Farmers will be prioritized in allocation of sales lot in the NWM as they establish the collaborative collection and distribution system using the collection center.
- 2) Process 2: The result of training at the collection center will be assessed through the monitoring of performance at the sales section in the wholesale market, which will be fed back to the farmers' association.
- 3) Process 3: The above result will be evaluated by the management committees of the collection center and wholesale market, which at the end will be compiled by the assigned divisions in the Prefecture and Municipal.
- 4) Process 4: This evaluation report will be distributed to all producers of the Department of Santa Cruz, through the Prefecture aiming for raising their awareness.

- 5) Process 5: The Ministry of Agriculture, Cattle and Rural Development is responsible for disseminating throughout the country the technology transfer result in Santa Cruz Prefecture as a national model.

4.4.2 Operation and Management Plan of the NWM

(1) Law/Regulation and Organizational Setup for the NWM

Neither Santa Cruz City nor the Republic of Bolivia holds wholesale market law. Only Municipal Market Law is found in Municipal Ordinance as for market regulations. Regarding management/operation of the market, municipal government manages and operates the municipal market based upon this ordinance. The Municipal Government should enact a NWM law/regulation as an ordinance formed in cooperation with the wholesale market users and set up a new organization on management and operation of the NWM in order to keep it from falling into the same disorder as seen in the existing Abasto Market. The proposed rules/regulations of the Market have been agreed by the representations of users' associations and Prefecture/Municipal Governments at workshops. The rules/ regulations are shown in Table A.2.4-20.

1) Law/Regulation

The following items should be included in the new law/regulation in order to successfully implement the Project.

a) Management Organization

Management Committee, Management Body, and Operation/Maintenance Organization (users' organization).

b) Management

Kinds of commodities traded, qualification and registration of users, transaction system, tariff (fee) system, operation days and hours, standard of product packing, collection/publication of marketing information, monitoring of selling section use, facility use, and prohibition/penalties.

c) Operation and Maintenance

Security control, price/weight control, control of entrance/circulation/ parking of vehicles, mediation of conflicts, sanitary control and garbage collection.

2) Management Organization

As to management organization, the following three options are taken into consideration. The Study Team has evaluated and discussed the three options in several meetings with the representatives of relevant government agencies and users' organizations. The progress of the evaluation and discussions are described below.

a) Three Options of Management Organization

i) Option 1: Municipal Government Takes the Initiative

The Municipal Government shall own the premise, the facilities shall be built with the fund procured by the Prefecture and Municipal Government as development investment fund from their own capital and domestic and

international sources. The management and operation of the Market should promote equitable economic activities without being driven by political motivation and interest. Also, the Management Committee composed of representatives of users' associations and observers (Prefecture and Municipal) should be established to take up advisory role on market operation.

ii) Option 2: Public Corporation Takes the Initiative

The public corporation will be 100% funded by local governments (Prefecture and Municipal), CAO/ ASOFRUT, producers' organizations and users. Its advisory committee will also function as management committee to recommend the president of the corporation, to be consulted over management and operation policies and to audit its account.

iii) Private Sector takes the Initiative

The premise and basic infrastructure is owned by the Municipal. The Municipal Government will discuss with private organization(s) in order to transfer its management to the management body established by the private organization(s) after an appropriate period of time. In such a case, it is possible that the private organization(s) monopolize the market management or exclude small-scale producers in pursuit of economic profit of a specific interest group. Therefore, the representatives from the public (Prefecture, Municipal Government) should be included as a member of the Management Committee in order to hold fairness.

Characteristics of the three options for management/operation of the NWM are shown in Table A.2.4-21.

b) Selection of Best Management Organization

The best management organization was selected through evaluation of characteristics of the three options by using evaluation criteria and discussing with the representatives of Prefecture/ Municipal Government as well as users' organizations at workshops.

i) Evaluation criteria

- Construction aspect
 - Availability of provision for construction fund
 - Possibility of repayment of fund
 - Management/supervision for construction period
- Management/operation aspect
 - Possibility to build up management and operation system
 - Competence of management and operation
 - Provision of operation fund
 - Securing of human resources
 - Efficiency of management/operation
 - Securing of equitable use
 - Promotion of marketing industries
- Environmental control

ii) Best Management Organization

The evaluation of three options is shown in Table A.2.4-22.

Marketing of fruits and vegetables is a commercial activity. Therefore, option 3 that private sector takes the initiative is the best one in order to draw out the vitality in private sector and promote private commercial activities. However, currently the commercial activities by private sector in Bolivia are small scales and have no powers. It is necessary to support and guide for private sector by public organizations. Because wholesalers who will be users of NWM face the difficulties to provide a construction fund, repay the loan with high interest and bear depreciation cost because of small scales at present. And also, regarding management organization and operation/ maintenance of the market, it will be difficult and take a long time to solve mutual distrusts and conflicts among existing users' organizations and to build one organization immediately.

On the other hand, option 2 that public corporations take the initiative will need a long time for legal procedure to establish corporation and provision of the construction fund. Public corporation must repay the loan with interest of construction fund, and be burdened with depreciation cost. Consequently, its business will be difficult. In case of option 1 that municipal government takes the initiative, municipal government should provide construction fund, and repay the loan with interest. Therefore, management and business of the market will be not difficult if municipal government will be burdened with depreciation cost.

As above-mentioned, in case of option 1 that municipal government takes the initiative, the provision of construction fund and management/ business of the market will be less difficult comparing with the other two options. However, it will have possibility of political influence and its staff are not competent in a commercial business. The following plan should be selected as a best plan taking into consideration about these points. In initial stage, option 1 that municipal government takes the initiative was selected. The management committee that its members should be composed of users in a central core depend upon the consensus of participants through workshops, should be established and actually manage/ operate the market under the Mixed Board. Management Committee should be participated by representatives of the prefecture and municipal government of the Mixed Board as observers in order to monitor and supervise for the fair management/ operation. Then, after an appropriate period of time, finally Mixed Board and Management Committee will transfer only management/ operation of the market to users' organization (wholesale company) through legal procedure same as the form of management/ operation of option 3.

c) Management Organizations

Thus the following organizations are proposed as management organizations for the NWM.

- i) Management Committee
- Members of the Committee

- Representatives from users' associations who engage in wholesale business
- Representatives from other users such as transporters, producers, retailers as associate members
- Representatives of the Prefecture and Municipal Government from Mixed Board as observers for their supervising role

- Functions

- Preparation of the regulations of Management Body
- Allocation of the staff of the Management Body
- Appointment of the manager of Management Body
- Implementation and supervision of the regulations of management and operation/ maintenance
- Examination and approval of the management and operation/ maintenance plan
- Examination and approval of the yearly financial plan

ii) Management Body

Management Body is placed under the Management Committee. This organization has two divisions and six sections under the manager and shall be actually in charge of management and operation/ maintenance. The functions of these sections are as follows.

- Administration division

- Security and vehicle control section: security control inside the market, control of entrance/ circulating/ parking vehicles and truck scale control.
- Finance and accounting section: In charge of finance and accounting, collection of various fees of the market, preparation of yearly financial plan
- Personal and register section: Personal affairs, registration of users, general affairs
- Operation/ maintenance section: Sanitary control, cleaning, garbage treatment, maintenance

- Marketing division

- Information section: Collection, processing and publication of marketing informations
- Monitoring section: Monitoring of proper use of the wholesale sections, price and weight control of products

Management Body will employ the permanent staff of 8 persons including the manager and 11 part-time staff, requiring total of 19 personnel (see Fig.A.2.4-12).

iii) Users' Organization

Users' Organizations pertaining to the use of facilities and the market shall undertake operation/ maintenance under the instruction of Management Body.

(2) Proposed plan of Management and Operation/ Maintenance of the NWM

1) Management system

a) Initial stage

The Municipal Government shall be the implementation agency for the construction of the NWM. Initially, after the completion of the NWM construction, the Mixed Board (Project Office No.2) shall supervise the overall management/ operation and the Management Committee composed of representatives of users' associations and observers (Prefecture, and Municipal Government) shall actually manage, operate and decide all important matters on the Market. At this time, the entrust contract on management and operation of the market shall be signed. The Municipal Government of Santa Cruz shall own the land and construct the facilities by the fund provided from domestic and foreign sources by the Prefecture and the Municipal Government.

The management and operation of the market should promote efficient utilization of the market and equitable economic activities without being driven by political motivation and interest.

The approval of the Mixed Board is necessary for making rules/ regulations of the market, income statement and provision of fund through examination of the Management Committee.

The wholesalers' sections shall be rented to users. After one year of monitoring sales sections use, users with good utilization will have an opportunity to rent another section for business expansion.

In order to make the NWM attractive to all users, the NWM should be able to provide equal opportunity and steady supply and trading volume of various products.

b) Final Stage

The Wholesale Company will be organized and established by users. The Municipal Government and Management Committee will transfer the supervision and management/operation functions to the Board of Directors of the Wholesale Company through legal procedure. As such, representatives of public agencies (the Prefecture and Municipal) shall be included as observers of the Board so as to avoid monopolization of the Market or exclusion of small-scale producers in pursuit of economic profit by a specific interest group.

2) Maintenance Scheme

The Management Committee and Users' Organization will maintain the Market according to regulations of the Market under the supervision of the Mixed Board.

3) Management and Operation/ Maintenance System

Management and operation/ maintenance system are shown in Table A.2.4-23.

The Municipal Government shall implement the rehabilitation of basic infrastructure and facilities depend upon the request from the Management Committee and the Mixed Board. Regarding rules/ regulations of the Market,

products traded, qualification of wholesalers, transaction system, tariff system and operation days and times shall be decided by the Management Committee depend upon the request from users, but the examination of the Mixed Board shall be necessary. The Management Committee shall carry out monitoring of utilization of wholesalers' sections, collection and publication of marketing informations and price and weight control, etc.

The Management Committee shall implement security control inside the market, price and weight control and circulating vehicle control, mediation of conflicts and garbage treatment cooperating with the Users' Organizations.

4) Form of Market Use

Forms of the NWM use are described as below.

Stage 1: Incoming trucks to the NWM receive the admission card at the entrance.

Stage 2

- Route 1: Incoming trucks will directly unload their commodity in Wholesalers' section (Market Hall-1), as suppliers (producers/intermediaries) have had prior arrangements with wholesalers over incoming volume and price, and either of the following three methods of trading would be followed.
 - Trading method 1 (Contract): The wholesaler contracts with the supplier before harvest, to purchase the product at an agreed price.
 - Trading method 2 (Consignment): The wholesaler is consigned to sell the product by the supplier, payment settlement for the product will be done on the same day when the products are sold minus the commission charges for the consignment.
 - Trading method 3: (Purchase): The wholesaler purchase the product outright, payment takes place on the spot or at the end of the day.
- Route 2: This is the case in which no prior arrangement between the supplier and wholesaler takes place before shipment. The incoming truck would unload in Market Hall-2 before the Market opens, and supplier would carry the load to Market Hall-1 for wholesaling. Buyers in this case are wholesalers of the Market and retailers of other markets. The account is settled on-the-spot and by cash.

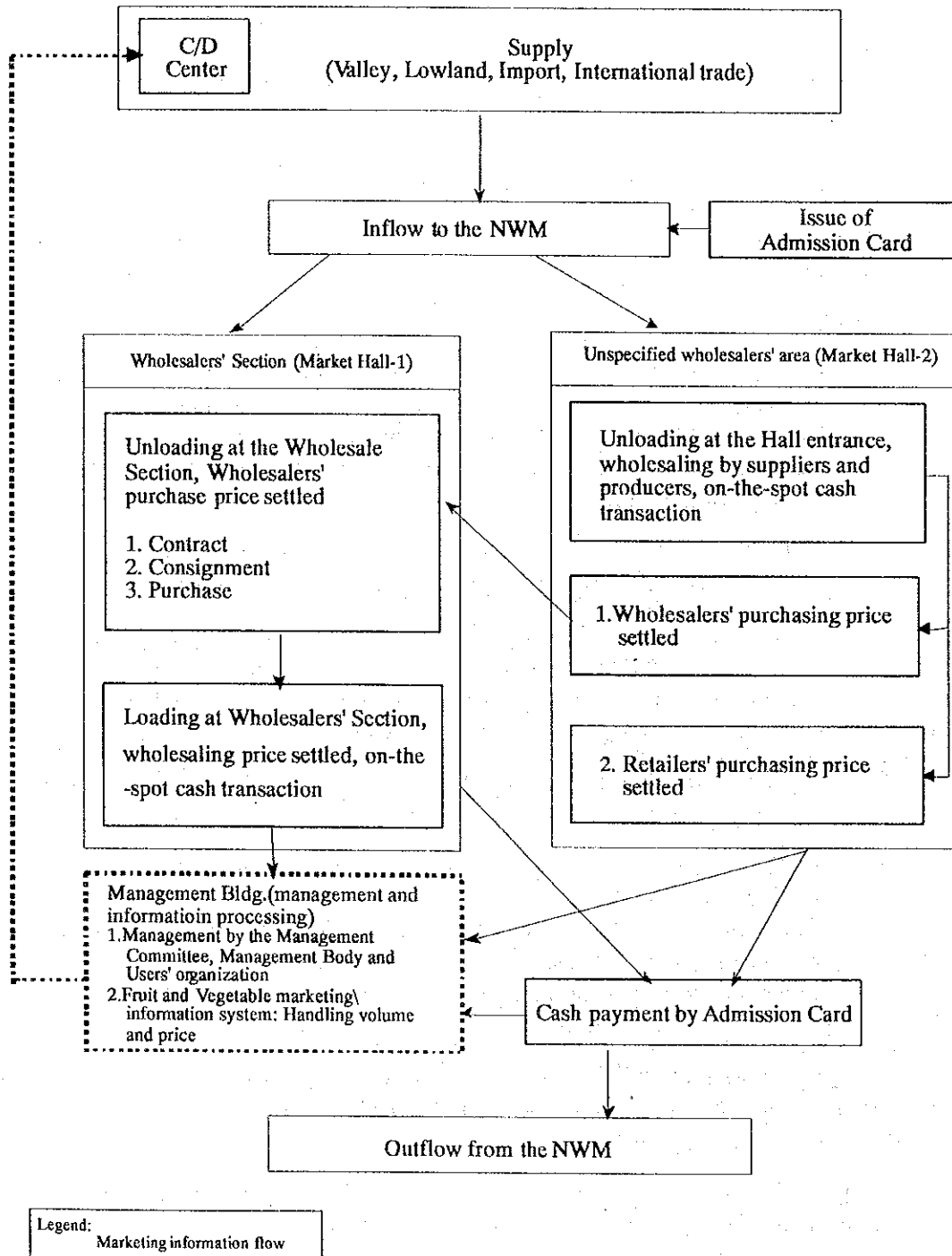
Stage 3: In Market Hall-1, wholesalers would sell products directly unloaded to their section and/ or purchased at Market Hall-2 to retailers. Payment is on-the-spot and by cash.

Stage 4: Entered/ parked trucks are all supposed to present the admission card at the management office, and pay the fee indicated on the card to exit.

Stage 5: The incoming volumes, trading prices, and collected fee are all recorded at both the operation office of the administration building and information center, for publication at any time. Producers will be provided with marketing information (price, inflow volume) at the production site

through C/D center or farmers' cooperative. Farmers' association (C/D center users' group or farmers' cooperative) will base their decision on collection and distribution of products on this information.

The form of market use is shown in the figure below.



Forms of Use and Trade for Target Project (NWM & C/D Center)

The following table is the summary of trading forms and operation/ maintenance activities by time period of the market schedule.

Place	Inflow handling, unloading, and purchasing hours 18:00-7:00	Wholesale hours 7:30-12:30	Cleaning hours 12:30-18:00
Market Hall-1 (Wholesalers' section)	(1) Product/vehicle flow <ul style="list-style-type: none"> Product buyers are fixed Incoming trucks are checked of its carrying volume by product at the truck scale. Incoming trucks park at the truck berth in front of the Wholesalers' section to unload before 7:00 without waiting. Unloaded trucks leave immediately or park at the truck berth. All product carrying trucks leave by 7:30. 	(1) Product/vehicle flow <ul style="list-style-type: none"> Retailers of Municipal Markets come by bus or taxi. Retailers purchase at the Wholesalers' section. The sections are located according to the product for the buyers to be able to easily compare the price and quality. Retailers form a group to use intra-market taxi and directly load their purchased products at the truck berth in front of the Wholesalers' section and exit. Alternatively, individual retailers may use a cart to carry their purchase to the bus stop. 	(1) Cleaning <ul style="list-style-type: none"> Wholesalers clean the front areas of their section.
	(2) Trading method <ul style="list-style-type: none"> Face-to-face transaction and on-the-spot cash payment. If the account cannot be settled by 7:00, it should be settled by 12:30. Producers can obtain information of incoming volume and price of the previous day before shipment, to enable better shipment arrangement and price negotiation. 	(2) Trading method <ul style="list-style-type: none"> Face-to-face and cash-on-the-spot transaction. Retailers can obtain wholesale price of the previous day at the bulletin board in the Market for reference. 	
	(3) Cleaning <ul style="list-style-type: none"> Wholesalers clean the front areas of their section from 7:00-7:30 		
Market Hall-2 (Unspecified wholesalers' area)	(1) Product/vehicle flow <ul style="list-style-type: none"> Products buyers are unspecified. Incoming trucks are checked of its carrying volume by product at the truck scale Incoming trucks park at the truck berth in front of the Wholesalers' section to unload and display by 7:00 without waiting. Unloaded trucks leave immediately or park at the truck berth. All product carrying trucks leave by 7:30. Wholesalers purchase at the Hall, carry products to the Wholesalers' section by cart or intra-market taxi. 	(1) Product/vehicle flow <ul style="list-style-type: none"> Producer/ intermediary acts as wholesalers during this period. Buyers are wholesalers of the Wholesalers' section and retailers. Wholesalers during this period act as intermediaries. The wholesaler purchase products from the producer/wholesaler as intermediary, to sell to retailers in the Wholesalers' section after carrying by cart or intra-market taxi. Retailers transport the purchased products by taxi or bus. 	(1) Cleaning <ul style="list-style-type: none"> Producer/ intermediary clean the Hall.
	(2) Trading method <ul style="list-style-type: none"> Face-to-face, cash-on-the-spot transaction Producers can obtain information of incoming volume and price of the previous day before shipment, to enable better shipment arrangement and price negotiation. 	(2) Trading method <ul style="list-style-type: none"> Face-to-face, cash-on-the-spot transaction 	
	(3) Cleaning <ul style="list-style-type: none"> Producers clean the front areas of the Hall from 7:00-7:30. 		

Administration Building (Management Body)	(1)	Information collection • Staff record incoming volume (with truck scale) and price by product.	(1)	Information collection and compilation • Staff compile incoming volume and wholesalers' purchasing price on the computer. • Staff collect wholesale price by product.	(1)	Information processing • Compiled information is processed on the computer to be sent to qualified people in the market, mass media, and those who pay for the information. The data is also posted on the bulletin board within the Market.
	(2)	The Management Body is in charge of control of security, price/weight and circulation/ parking of vehicles.	(2)	The Management Body is in charge of control of security, price/weight and circulation/ parking of vehicles.	(2)	Garbage collection • Garbage is collected from each hall and brought to the garbage collection yard.
			(3)	The Management Body monitors effective use of the Wholesalers' section.	(3)	Cleaning of inside the Market including toilets.

4.4.3 Operation and Management Plan of Abasto Market

(1) Law/ Regulation and Organization Setup for Abasto Market

Regarding the law/ regulation of municipal market in Bolivia, each city possesses its own Municipal Ordinance resolutions on the market. Each municipal government manages and operates the market depending upon these resolutions. These resolutions enforce the rules/ regulations on tariff of sales section and not the comprehensive rules/ regulations on management and operations of the market.

The existing operation of the Abasto Market is in chaos and conflicts because the major seven users' associations in the market control, manage and operate their respective areas and there is no one unified organization to manage and operate the market. After introduction of the NWM, the existing Abasto Market shall be changed to retail market. The new rules/ regulations of the Abasto Market shall be enacted based upon the municipal ordinance with the consensus of the users in the Abasto Market in order to formulate orderly and efficient market.

1) Law/ Regulation

The following items shall be included in the new law/ regulation of the market.

Management operation/ maintenance organization

Management Committee, Management Body, and Users Organization should be established.

Management

To clarify and control the following items; kind of product traded, registration of users (retailers), transaction system, tariff system, operation days and hours, collection and publications of marketing information, utilization rules of selling sections, control of sales on the road around the market, rules of facility use, prohibition/ penalties and control of entrance of large scale trucks.

Operation/ maintenance system

The following items should be effected; security control, price/ weight control, control of entrance/ circulation/ parking of vehicles, mediation of conflicts, sanitary control, garbage treatment and cleaning.

2) Management Organization

a) Management Committee

Members of the Committee

- Representatives of registered association of retailers and farmers/ intermediaries who directly sell to consumer, and unregistered private groups.
- Representatives of the Prefecture and Municipal Government from Mixed Board as observers for their supervising role.

Functions

- Preparation of the regulations of the Management Body
- Allocation of the staff of Management Body
- Appointment of the manager to the Management Body
- Implementation and supervision of the regulations of management and operation/ maintenance
- Examination and approval of the management and operation/ maintenance plan
- Examination and approval of the yearly financial plan

b) Management Body

Management Body is placed under the Management Committee. The manager of this Management Body has six sections under him;

- Security and vehicle control section: security control inside the market, control of entrance/ circulating/ parking vehicles
- Finance and accounting section: In charge of finance and accounting, collection of various fees of the market and preparation of yearly financing plan
- Personnel and Registration section: Personnel management and registration of retailers
- Operation/ maintenance section: Sanitary control, cleaning and garbage treatment
- Marketing Information section: Distribution of wholesale information (prices and inflow volume).
- Monitoring section: Monitoring of proper use of the selling sections and price/ weight control

Management Body will employ the permanent staff of 8 persons including the manager and 4 part-time staff, requiring a total of 12 personnel (see Fig. A.2.4-13).

5 PROPOSED PLAN OF TRAINING AND TECHNICAL ASSISTANCE ON MANAGEMENT AND OPERATION OF THE NEW WHOLESALE MARKET AND ABASTO MARKET

5.1 Training

(1) Objective

The provision of intensive training and technical support for related government staff and users is essential for the introduction and establishment of the NWM. Because there is no wholesale market for fruits and vegetables in Bolivia, its instruction, management and operation/ maintenance system has not yet been developed. The objectives of the plan are to provide efficient and effective training and technical support on the management and operation/ maintenance system to the people related to the NWM and Abasto Market.

(2) Target

The target of training will be divided into three groups; major members of relevant organizations, members of management organizations of the NWM/ Abasto Market, and market users.

a) Group A

- Prefecture and Municipal staff relevant to the Project
- Members of the Mixed Board
- Members and sub-members of the NWM Management Committee
- Members of Abasto Market Management Committee
- Managers of NWM and Abasto Market

b) Group B

- Staff of NWM and Abasto Market management organizations

c) Group C

- Market users, i.e., wholesalers, retailers, producers and transporters

(3) Training Components

The training must involve not only the product marketing aspect but technical aspects of law/ regulation/ institution, and management/ operation/ maintenance of wholesale and retail markets. The following are the components.

1) Product Marketing

- Existing product marketing system in Santa Cruz Department
- Product marketing system in advanced countries
- New product marketing system to be established in Santa Cruz Department

2) Law/ Regulation and Institution

- Existing draft laws/ regulations of wholesale market and Abasto market
- Product marketing laws/ regulations of advanced countries
- Draft laws/ regulations of the NWM and Abasto Market

Management organizations of the market

- Management Committee, Management Body, Users' Organization

Market regulations

- Products handled
- Qualification of wholesalers
- Transaction rules
- Fee system, fee collection system and accounting system
- Opening days/ hours of the market
- Standardization of packing
- Collection and disclosure of marketing information
- Monitoring of the wholesalers' section use
- Regulations of facility use
- Penalty

Operation/ maintenance regulations

- Operation and maintenance of basic infrastructure and market facilities
- Control of circulation/ parking of entering vehicles
- Control of price/ weight
- Security control
- Mediation of conflicts, sanitary control and garbage collection

3) Management, Operation/ Maintenance

Management method

- Encouragement of compliance to and revision of set handling products
- Implementation of screening qualified wholesalers
- Encouragement of compliance to transaction rules
- Compliance to and revision of fee system, fee collection system and accounting system
- Setting packing standard and its enhancement
- Collection and disclosure of marketing information
- Monitoring and improvement of wholesalers' section use and its revocation
- Other regulations and their application

Operation/ maintenance method

- Operation/ maintenance of basic infrastructure and market facilities
- Control of circulation/ parking of entering vehicles
- Price and weight control
- Security control
- Mediation of conflicts, sanitary control, garbage collection and cleaning

(4) Training Method

- Workshop and on-the-job training
- Visiting other markets in Bolivia
- Training in advanced marketing countries

(5) The following table summarizes training components, methods and period

Training Components	Target	NWM		
		Pre-construction	Construction	Operation
Components	Group A NWM Abasto	- Product marketing - Market law/ regulation/ institution - Management, O/M system of similar markets in Bolivia - Management, O/M system of markets in advanced countries	- Market law/ regulation and their application	- Market management, O/M
	Group B NWM Abasto	- Product marketing - Management, O/M system of similar markets in Bolivia - Market law/ regulation/ institution - System and method of market management and O/M	- Product marketing - Management, O/M system of similar markets in Bolivia - Market law/ regulation/ institution - System and method of market management and O/M	- Method of market management and O/M
	Group C NWM Abasto	- Organizing small-scale traders and producers	- Market law/ regulation/ institution - System and method of market management and O/M	- Method of market management and O/M
Training Method	Group A NWM Abasto	- Workshop - Visit to similar markets in Bolivia - Training in advanced countries	- Workshop	- Workshop
	Group B NWM Abasto	- Workshop - Visit to similar markets in Bolivia	- Workshop - Visit to similar markets in Bolivia	- Workshop and OJT
	Group C NWM Abasto	- Workshop	- Workshop - Distribution of textbooks	- Workshop and OJT - Distribution of textbooks
Technical Assistance (lecturer)		- Domestic experts - Foreign technical advisor	- Domestic experts - Foreign technical advisor	- Foreign technical advisor

(6) Institutional Setup and Implementation Schedule

1) Institutional Setup

The Mixed Board and affiliated Project Offices are responsible for implementing training and technical assistance. Training and technical assistance programme will be formulated based on the Final Report, and will be carried out after the establishment of Mixed Board with its approval.

2) Implementation Schedule

Table A.2.6-1 shows the implementation schedule of training on product marketing, market law/ regulation/ institution and management/ operation/ maintenance.

Regarding training on product marketing, Group A trainees will have experts and university lecturers on Santa Cruz Department product marketing, after which these trainees will be responsible for training Group B.

As for law/ regulation/ institution and management/ operation/ maintenance, technical advisors from advanced countries will train Group A, while Group B trainees will be lectured by Group A trainees.

(7) Cost

The cost for training and technical assistance from 1999 to 2005 will be as below.

		Unit: US\$
Programme	Cost	
1. Training and lecture in Bolivia		
(1) Workshop handouts and lecturer payment		8,280
(2) Study trip to Cochabamba		6,000
Sub-total		14,280
2. Training in and technical advisor dispatch from MERCOSUR countries		
(1) Technical advisor dispatch		2,163,600
(2) Training in MERCOSUR countries		22,800
(3) Study trip to MERCOSUR countries		9,000
Sub-total		2,195,400
Total		2,209,680

Remark:

For details, refer to Table A.2.5-1

5.2 Technical Assistance

5.2.1 General

The following describes technical assistance for training of principal members of relevant institutions of the Project, Management body staff for the NWM and Abasto Retail Market, and users of these markets.

(1) Technical assistance by experts from the Prefecture, University, etc.

Technical assistance will be given by Prefecture staff or University lecturers with expertise and experience in fruit and vegetable marketing system.

(2) Foreign assistance

Technical assistance by foreign technical advisors experienced in wholesale market law/regulation, institution and management/ operation of the market and overseas training are illustrated below.

Technical assistance required for the management of NWM and Abasto Retail Market

Advisor	Specialty	Number	Period
Long-term Advisor A	Market law/regulation, institution, Cooperative C/D	1	1999 - 2000 2 years
Long-term Advisor C	Coordination, Market rationalization	1	2000 - 2004 4 years
Long-term Advisor F	Market management, operation/ maintenance	1	2001 - 2005 4 years

Remark:

The necessary number of foreign technical advisors for the Project is 6 (A-F in the order of their scheduled assignment). Three of them (A, C & F) for the NWM and Abasto Retail Market are shown above.

Overseas training

Training	Number	Period
Wholesale market law/regulation, institution, and market management/ operation	6	30 days

For schedule of technical assistance, please refer to Table A.2.6-1.

5.2.2 Terms of Reference for the Foreign Technical Advisors

(1) Advisor A. Long-term Technical Advisor at Preparation Stage: 2 years

Field of Specialty: Cooperative marketing, Market law/regulation and institution

- 1) Objective
 - a) Assistance and guidance in establishment of law/regulation and organization necessary for starting construction and operation of the Project.
 - b) Assistance in preparation of inaugurating operation of the C/D center Pilot Project.
- 2) TOR

Advice and assistance regarding the following.

 - a) Establishment of the Mixed Board Inception Committee: selection of representatives in the Inception Committee
 - b) Establishment of Mixed Board, Management Committee and Management Body: Formulation of organizations and their regulations
 - c) Formulation of Wholesale Market Law and Retail Market Law
 - d) Formulation of C/D center and Market management regulations
 - e) Formulation of implementation plan of the Project
 - f) Drafting request letter for technical assistance
 - g) Implementation of initial institutional training program and trial collection and distribution at production site
 - h) Implementation of training programs pertaining to Market law/regulation and institution
 - i) Equitable selection of NWM participants and effective transfer

3) Position

Initially in the Project Office at the Prefecture and Municipal, then to be transferred via the Mixed Board Inception Committee to the Mixed Board

(2) Advisor B. Short-term Technical Advisor at Implementation Stage: 1 year

Field of Specialty: Cooperative marketing in the Pilot Project C/D center

- 1) Objective

Assistance in the management of the C/D center Pilot Project
- 2) TOR

Advice and assistance regarding the following.

 - a) Implementation of institutional training
 - b) Implementation of technology extension

- c) Implementation of trial collection and distribution
- d) Formulation of management regulations of the C/D center
- e) Producers' participation in the NWM

3) Position

Sub-project Office in the production area

(3) Advisor C. Long-term Technical Advisor at Implementation Stage: 4 years

Field of Specialty: Coordination/ rationalization of marketing

1) Objective

Coordination of relevant parties to promote the formulation of widespread fruit and vegetable marketing network.

2) TOR

- a) Advisor to the President of Management Committee. Coordination between Project Office No. 1 and Sub-project Office in the production area. Promotion of rationalization of marketing between production site and consumption site.
- b) Coordination among relevant agencies, experts, and between agencies and experts

3) Position

Mixed Board.

(4) Advisor D. Long-term Technical Advisor at Implementation Stage: 5 years

Field of Specialty: Cooperative marketing

1) Objective

Guidance and management following the launching of the C/D center Pilot Project, to get the Project started in the right direction, to develop models of organization and management and cooperative sales system at the NWM applicable to the whole project in the production area

2) Terms of Reference

- a) Guidance in C/D center management (cooperative marketing)
- b) Implementation analysis of C/D center Pilot Project first year schedule (including sales plan at the NWM), financial scheme, Management Committee/ Body regulations, and C/D center management regulations; clarification of deterrence in project implementation procedure as well as its revision; and development of organizational/ management models through these advisory tasks
- c) Assistance in training for application of above models of organization/ management to other areas

3) Position

Project Office No. 1 and Sub-project Office.

(5) Advisor E. Long-term Technical Advisor at Implementation Stage: 2 years

Field of Specialty: Quality control/ standardization and collective marketing accounting

1) Objective

Assistance in technology extension program implementation, i.e., extension of product quality/ standards and cooperative marketing accounting system

2) Terms of Reference

Advice and assistance regarding the following.

- a) Introduction of standardization, selection and packing technologies of products
- b) Introduction of accounting system and training for cooperative marketing

3) Position

Project Office No. 1 and Sub-project Office

(6) Advisor F. Long-term Technical Advisor at Implementation Stage: 4 years

Field of Specialty: Market management, operation/ maintenance

1) Objective

Assistance in functional management, operation/ maintenance of NWM and Abasto Market

2) Terms of Reference

Advice and assistance regarding the following.

- a) Formulation of management, operation/ maintenance scheme of NWM and Abasto Market
- b) Formulation of financial scheme of NWM and Abasto Market
- c) Improvement of management through ongoing analysis of management, operation/ maintenance of NWM and Abasto Market
- d) Reorganization of sales sections in Abasto Market

3) Position

Project Office No. 2

6 OVERALL IMPLEMENTATION PLAN

6.1 Preliminary Coordination Stage

Based on the results of this Study, the Project will be situated in the frameworks of national, prefectural and municipal plans (council approval), after which consensus building among relevant agencies and procedures for expenditure of the fiscal year will begin. In Santa Cruz Prefecture, the Department of Sustainable Development (or a newly established department responsible for the Project through reorganization of the Prefecture) and the Department of Economic Development will take primary responsibility for coordination with organizations in the Prefecture necessary for the Project implementation. In the Municipal of Santa Cruz, the City Planning Council and Secretariat of Public Works are chiefly in charge of coordination within the Municipal.

The Prefecture and Municipal of Santa Cruz will each set up an office for the Project implementation in order to satisfy necessary procedures for the establishment of the "Mixed Board Inception Committee". The two offices in the Prefecture and the Municipal are independent of one another at this stage though they are to hold regular meetings to promote understanding and conduct required undertakings. The Bolivian side is to proceed with request letters for technical assistance and funding to assist with the Project implementation.

Promptly after its establishment, the Office in the Prefecture will begin training for producers to organize themselves with mass guidance, one component of the whole training programme. This training will enable the next training programme and on-the-job or on-the-site training to be carried out as soon as the implementation stage begins. Simultaneously, producers will be instructed on gaining user qualification of the NWM and Abasto Market.

6.2 Preparatory Stage

The Mixed Board Inception Committee is responsible for drafting law/ regulations over the Mixed Board's objectives, functions, organizational structure and management. The Mixed Board will be set up through approval of both Prefectural and Municipal Councils. The Inception Committee is also in charge of transfer promotion including preliminary selection of qualified persons, in avoidance of serious troubles when the Mixed Board begins to conduct the actual transfer of wholesalers from the existing Abasto to NWM.

6.3 Implementation Stage

The Mixed Board will formulate and execute the Project implementation plan (objective, function, organizational structure, human resource allocation, budget allocation). The Mixed Board will have two Project Offices that are mainly responsible for the formulation of annual implementation scheme, human resource allocation, budget allocation and supervision of expenditure and supporting activities for individual project management in each site. Project Office No.1 and No.2 will be in charge of the Project in production and consumption area respectively.

6.3.1 Implementation Plan for NWM and Abasto Market

(1) Organizational Set-up for Project Implementation

The development of the NWM shall be led by public agencies and management/ operation of the NWM shall be implemented by the management Committee composed of users' associations under the supervision of the Mixed Board at the initial stage (refer to Fig.A.2.6-1 for Project Implementation Process).

After an appropriate period of time, Mixed Board and Management Committee shall transfer management/ operation of the market to the Board of Directors of the management body established by the private organization (Wholesale Company).

(2) Relevant Institutions for the Project Implementation

1) Municipal Council

The Municipal Council is in charge of enactment of municipal ordinances/ resolutions relevant to the Project and approval of the project budget. Urban Planning Commission and Market Commission assist the Municipal Council as advisory commissions on the city planning/ construction and management/ operation of the market respectively.

2) Municipal Government

City Planning Council, Secretariat of Industry and Commerce, Dept. of Environment and Secretariat of Public Works in Municipal Government are responsible for the implementation of the Project. City Planning Council and Dept. of Environment take charge of the project site selection from the city planning point of view and environmental assessment of the project site. Secretariat of Public Works is in charge of developing infrastructure and public facilities as well as formation of the budget.

As for agencies directly related to the market, Secretariat of Industry and Commerce is responsible for the management/ operation of the market in the municipality, and will provide human/ technical assistance from the experience to the newly established Project Office No.2.

(3) Overall Implementation Schedule of the Project

The overall implementation schedule, which covers the construction of the NWM, reorganization of Abasto Market, implementation schemes for training and technical assistance, the schedule of organizational setup of related agencies and organizations, and management, operation/ maintenance are shown in Table A.2.6-1. Major points of the schedule are as follows.

- Construction of the NWM will be divided into two phases
- Request letter on financial and technical assistance for foreign countries will be prepared and submitted within one month after receiving the Final Report
- Mixed Board and the Project Offices will be established before the end of 1999
- Annual budget will be prepared in the previous year

- Legal procedure for land acquisition of the NWM will be completed before the end of 1999
- Land acquisition will take place at the beginning of 2000
- Site preparation will be completed before the commencement of construction
- Management Committee will be organized by the end of 1999 for NWM, and by early 2000 for Abasto Market
- Management/ operation of the Market will soon be commenced after the completion of Phase I construction
- Training and technical assistance will be started at the same time as the launch of Inception Committee
- Technical assistance by foreign advisors will begin in 1999 as the Inception Committee is established and will end in 2005.

6.3.2 Examination of NWM Wholesalers' Section Rental Fee

(1) Rental Fee Set at Bs.25/section/day

As indicated in Table A.2.6-4, the balance of NWM Management Body will be in red if depreciation cost is included. If not included, net benefit will be generated that makes the balance positive, and self-financed operation will be possible from the first year of its launch.

(2) Rental Fee Set to Cover Depreciation Cost

In order to cover the depreciation cost, wholesalers' section fee and truck fee must be raised, the former from Bs. 25/day to Bs.40/day, and the latter twice as much as the original. The income statement and cash flow of this case are shown in Table A.2.6-5.

Financial analysis of transferred wholesalers' business in the case of rental fee covering the depreciation (Bs. 40/day) is illustrated below.

1) Handling volume of wholesalers transferred from Abasto to NWM

Year	Total Handling Volume of the Market (10 ³ t/year)			Handling Volume of Transferred Wholesalers (10 ³ t/year)		Average Handling Volume of a Transferred Wholesaler		
	Abasto	NWM	Total	Ratio(%)	Volume	Number	t/year /person	t/week /person
1998	258	-	258	61	157	88	1,784	34.4
2005	133	209	342	61	209	88	2,375	45.7

As seen above, the average handling volume of a transferred wholesaler is 34.4t/ week in 1998, and 45.7t/ week in 2005, i.e., a 33% increase.

2) Financial analysis of transferred wholesalers' business

In the financial analysis of the NWM, it was learned that the balance of wholesalers' business will be in negative if the rental fee is Bs. 25/ section/day with depreciation cost considered. Bs. 40/ section/ day is accountable for

covering depreciation cost and positive balance. Wholesalers' balance is considered with the assumption of wholesaler's average handling volume to be 46t/ week. The following briefly explains the result (for further reference, see Table A.2.6-2 in Annex 2).

Handling volume: 46t/ week
 Wholesalers' section rental fee: Case 1 Bs. 25/ day = Bs. 9,125/ year
 Case 2 Bs. 40/ day = Bs. 14,600/ year

Item	Products Handled				
	Potato	Tomato	Onion	Banana	Citrus Fruit
Sales amount	3,258	2,045	1,219	718	1,678
Gross Revenue	149	251	286	60	59
Net Revenue					
Case 1	46	168	184	29	15
Case 2	35	152	173	18	4

Unit: Bs.1000/yr

Comparative analysis of wholesalers' and producers' income was conducted. According to the socio-economic survey result, small-, middle-, and large-scale producers' average annual incomes are, Bs. 24,251, Bs. 39,454, and Bs. 117,144, respectively.

- For wholesalers handling potatoes, annual net income is Bs. 46,000 in case 1 and Bs. 35,000 in case 2, approximately equivalent to that of middle-scale producers.
- Wholesalers handling tomatoes and onions have their average annual net income at Bs. 168,000, and Bs. 184,000 for respective products in case 1, and Bs. 152,000 and Bs. 173,000 in case 2, which, in other words, match that of large-scale producers in either case.
- As for banana wholesalers, annual net income is Bs. 29,000 at the level of small-scale producers in case 1, and slumps below in case 2 to Bs. 18,000.
- For citrus fruits wholesalers, case 1 annual net income is Bs. 15,000 and case 2 Bs. 4,000, both below the income of small-scale producers with case 2 being remarkably minimal.

3) Break-even point of wholesalers' business by the product

Break-even point of wholesalers' business in Case 2 (wholesalers' section rental fee at Bs. 40/ day) for major products is examined as follows (also refer to Table A.2.6-3 in Annex 2).

Product	unit: t/ week				
	Potato	Tomato	Onion	Banana	Citrus Fruit
Break-even point handling volume	21.0	10.2	6.7	28.4	41.0

Average handling volume for transferred wholesalers is 46t/ week.

For wholesaling of tomatoes and onions, the break-even points are low at 10t/ week and 7t/ week. There should not be any problem in business.

The break-even point of potato wholesale is high at 21t/ week, and with rather

small net income, the business may face difficulty. However, current potato wholesalers in Abasto have intention to begin onion trading once they move to the NWM, which has not been possible for space restriction. This will help raise their income.

Wholesaling in bananas and citrus fruits have their break-even points higher than other products at 28t/ week and 41t/ week respectively. Considering that their net income is below the level of average small-scale producers, it seems difficult to keep the business profitable. As seen in Annex 2 Table A.2.6-2, this is due to the fact that, for bananas and citrus fruits, wholesalers' section fee takes up more than 50% of the expenditure.

Citrus fruits are seasonal products, and the season runs only for 4 months a year. Thus it will be necessary to utilize the sections off-season in pursuit of more efficient business. Agricultural cooperatives in San Juan (CAISY) and Okinawa (CAICO), who express their will to participate in NWM, have plans for off-season use of the section to display samples of or store rice and eggs, or to sell vegetables.

4) Conclusion

Market management, operation/ maintenance costs and depreciation cost are principally borne by market users (beneficiaries), which should be raised from rental fee of wholesalers' section.

Wholesalers' section rental fee set at Bs. 40/ day, transferred wholesalers' business will be financially viable, though some may have difficulty depending on the products handled.

Wholesale of tomatoes and onions will have no problems. Market information disclosure will realize reduction of losses caused by over-supply, and technology transfer at production site will promote quality improvement and standardization, which will bring additional profit to these wholesalers.

Potato wholesalers may have problems, though broadening handling commodities to include onions will compensate.

Bananas and citrus fruits need to be handled in the NWM considering their significant consumption volume and the range of products to be handled. Nonetheless, business in banana and citrus fruit wholesale will face prominent difficulties. Therefore it is required that rental fee for these two products be set lower than other products. Also, citrus fruits being seasonal products, off-season use of sections has to be taken into consideration, such as sales of flowers and vegetables.

Currently, banana and citrus fruit wholesalers in existing Abasto Market purchase their products once a week. Due to the long period to sell their products and poor handling, a portion of the products are wasted and thrown away. After these wholesalers are transferred to the NWM, their income may rise if the amount of products handled increase due to their efforts to improve their sales (greater efficiency) and reduce losses (from technology transfer on quality control).

The rental fee for the wholesalers' section is notably high considering the

current standard, and requires consent of users. It is also necessary that the fee be set at the lower side initially though it may not be able to cover the depreciation cost, and be raised gradually after the market management and individual business become stable.