

INCEPTION REPORT
FOR
THE FACILITIES PLANNING OF THE CAPIC
ON
TECHNICAL COOPERATION
FOR
THE HARAZ RIVER BASIN AGRICULTURAL DEVELOPMENT PROJECT

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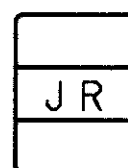


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September, 1980

JAPAN INTERNATIONAL COOPERATION AGENCY

(JICA)



1. Introduction

In response to the request from the Government of Islamic Republic of Iran, the Government of Japan has decided to conduct the study on the project-type technical cooperation for the caspian sea coastal area development project and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA has dispatched a study team from September 2nd to September 16th and a short-term expert for the facilities planning from September 2nd to November 15th for the necessary study for the preparation of the project-type technical cooperation. The team will confer with the officials of authority concerned the Government of Islamic Republic of Iran and conduct a field survey in Amol.

After the team return to Japan, the short-term expert will make further studies to complete the schematic design of the relevant facilities to be agreed by both sides.

This inception report describes the objective, scope of the expert's work and schedule of the study, etc.



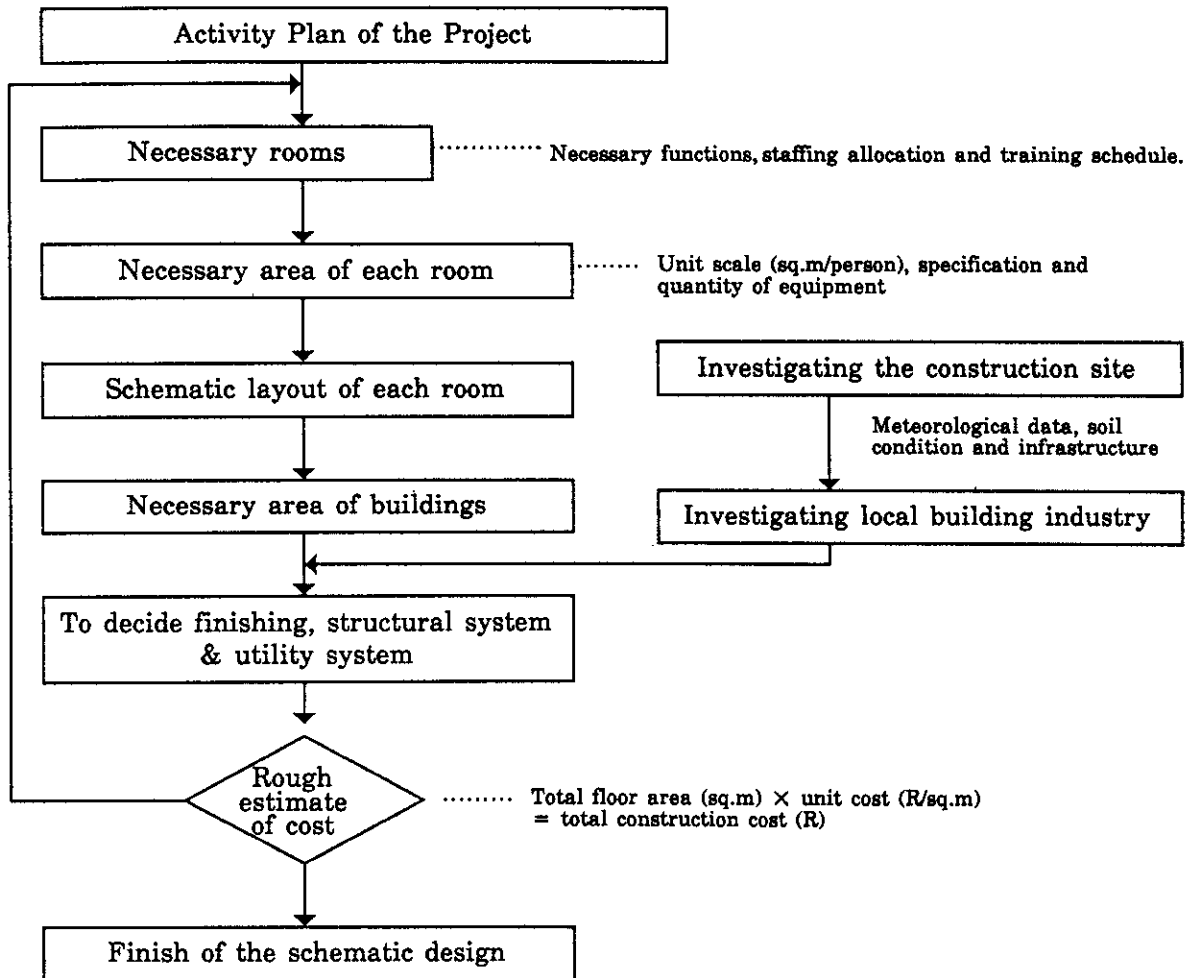
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2. Objective and scope of the short-term expert

The studies to be executed by the short-term expert for the facilities planning are as follows:

- 1) To establish the appropriate functions and capacity of the facilities.
The appropriate functions and capacity of the facilities will be established to ensure the implementation of the project-type technical cooperation, taking into consideration of the activity plan of the project such as TSI (Tentative Schedule of Implementation) and staffing allocation plan.
- 2) To investigate the construction site and the local building industry.
The necessary information to decide the structural and utility system of the buildings such as the soil condition, infrastructure of the construction site and the situation of local building industry will be investigated in cooperation with Iranian counterparts.
- 3) To make the schematic design of the facilities.
The schematic design will include a set of drawings for the facilities, as well as a rough estimate of construction cost based on floor area and unit costs.
- 4) To advise the Iranian counterparts on the detail design.

3. Procedure of the schematic design



4. Content of discussion

1) To establish the functions and capacity

- Activity plan
- Organization and staffing allocation
(refer to the Questionnaire-1, 2)
- Necessary rooms
- Construction site for the facilities

2) To define the layout plan and floor area

- Official standard of each room (refer to the Questionnaire-4)
- Equipment to be installed in each room
- Relations among rooms

3) To estimate rough construction cost

- Official unit cost (Rial/sq.m)
- Past data of construction cost

4) To organize the set-up for the detail design and construction

- Procedure of the detail design
- Condition of the contract
- Progress schedule of construction

5. Planned facilities

At present the facilities proposed by both Iranian side and Japanese side are as follows:

- 1) Administration office
 - a) General office
 - b) Meeting room
 - c) Drafting room
- 2) Training room
 - a) Classroom
- 3) Workshop
 - a) Rice mill
 - b) Fertilizer store
 - c) Agricultural chemicals store
 - d) Seeding box store
 - e) Drying room
 - f) Seed store
 - g) Pretreatment room
 - h) Construction machine workshop
 - i) Construction machine garage
 - j) Agricultural production store
 - k) Plastic green house
- 4) Laboratory
 - a) Laboratory
 - b) Instrument room
 - c) Preparation room

5) Others

- a) Stable
- b) Forage store
- c) Milker room
- d) Keeper house
- e) Dormitory

6. Tentative schedule of the facilities planning

Phase of work	Location	Date	Content of Cooperation	Necessary Counterparts					
				Architect	Structural Engineer	Electrical Engineer	Mechanical Engineer	Quantity Surveyor	
SCHEMATIC DESIGN	TEHERAN	Sep. 7		Assigned C/P					
		Sep. 12	• Attendance of the signing of Minutes						
		Sep. 14							
		Sep. 15	• Arrival at Amol - Investigating the site circumstances/soil - Investigating local building construction						
DISCUSS/ APPROVAL	AMOL	Sep. 21							
		Sep. 22	• Meeting with CAPIC Staff - Drawing concept plan of Schematic design - Investigating building industry in Amol						
		Sep. 28							
		Oct. 3	• Meeting with CAPIC staff and Japanese Experts - Completing Schematic design						
DETAIL DESIGN	TEHERAN	Oct. 5							
		Oct. 9	• Arrival at Teheran						
		Oct. 10	• Discussion with C/P about the procedure of Detail design						
		Oct. 12							
			- Drawing the complete drawings of Schematic design - Advising on Detail design						
		Oct. 19							
		Oct. 26							
			- Advising on the bill of quantities						
DISCUSS/ APPROVAL	TEHERAN	Nov. 2							
		Nov. 9							
		Nov. 11	• Report to the Ministry of Agriculture						
		Nov. 13	• Report to the Embassy of Japan • Departure from Teheran						

Assigned C/P

7. Measures to be undertaken by the Government of Iran

1) To assign counterparts for each phase of design

1-1) Schematic design

- a) Architect
- b) Structural engineer

1-2) Detail design

- a) Architect
- b) Structural engineer
- c) Electrical engineer
- d) Mechanical engineer
- e) Quantity surveyor

2) To complete the detail design

The detail design will be finished by Iranian side during the sojourn of the short-term expert.

3) To provide the short-term expert with necessary data

- a) Soil investigation data
- b) Information on construction cost
- c) Answer to the "Questionnaire" submitted by the short-term expert.

QUESTIONNAIRE
FOR
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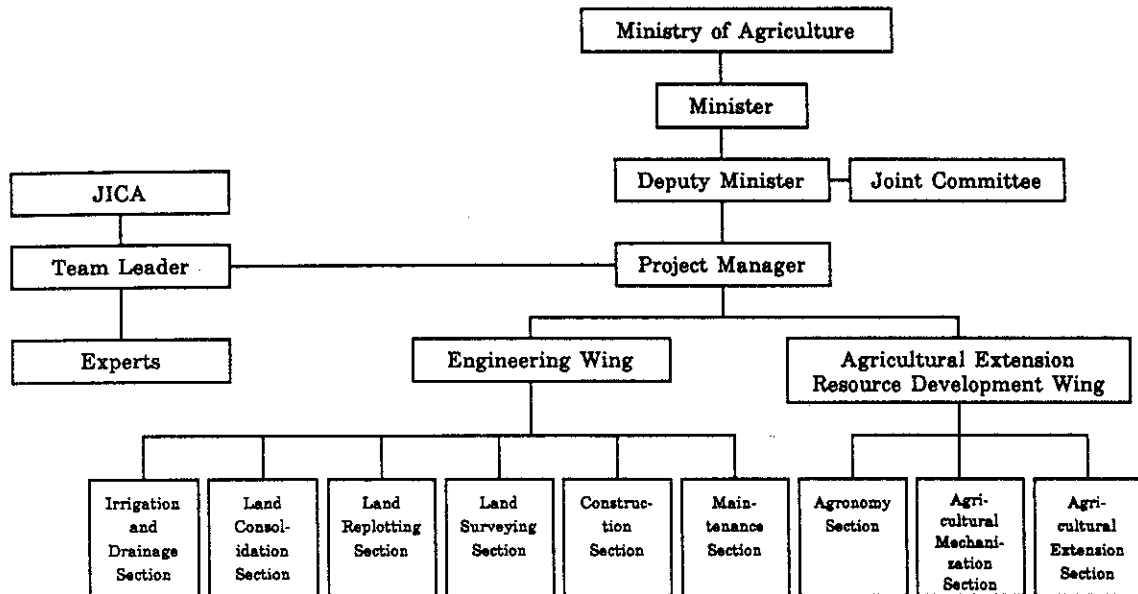
September, 1990

JAPAN INTERNATIONAL COOPERATION AGENCY

(JICA)

1. Organization of the CAPIC

1-1 Please confirm the organization



Please depict other sections if any.

1-2 What do we think about the staff for the administration and the building maintenance?

2. Staffing Allocation of the CAPIC

2-1 Please fill out the following table.

Discipline	Section	Chief Engineer	Engineer	Technician	Operator	Other	Total
Engineering	Irrigation and Drainage						
	Land Consolidation						
	Land Replotting						
	Land Surveying						
	Construction						
	Maintenance						
Agricultural Extension Resources Development	Agronomy						
	Agricultural Mechanization						
	Agricultural Extension						
Others	Building Maintenance						
Administration	Accounts Officer						
Total							

2-2 Ratio of male staff and female staff

Male _____ : Female _____

3. Training Schedule in the CAPIC

- Please offer the following information.

3-1 Planned schedule

Training discipline	Number of trainees	Duration	Necessary facilities

3-2 Ratio of male students and female students

Male _____ : Female _____

4. General Matter

- Please offer the following information.

4-1 Working Condition

- a) Ordinary working hour : from _____ a.m. to _____ p.m.
- b) Working day : _____
- c) Transportation of staff : by car _____ persons
Others _____ persons

4-2 Security system

- a) Roster of watchmen
- b) Is it necessary to install the fence around the building site?

4-3 Design Condition

- a) Standards or criteria to fix size of rooms

- office
Director _____ m²/person
Chief Engineer _____ m²/person
Engineer _____ m²/person
Technician _____ m²/person
Operator _____ m²/person
Others _____ m²/person
- Classroom _____ m²/person
(issued by _____)

5. Site Condition

- Please offer the following information

5-1 Existing situation of the building site

- a) Location :
- b) Area : _____ m²
- c) Soil condition : Please provide the soil investigation data
bearing capacity of soil _____ t/m²
(below the ground surface _____ m)

5-2 Wind direction: In summer = _____ , in winter = _____

5-3 Earthquake:

- a) Past record :
- b) Magnitude :
- c) Seismic :
- d) Frequency :
- e) Condition of damage :

5-4 Storm and Flood:

- a) Frequency of typhoon & heavy-rain :
- b) Max. Wind velocity :
- c) Wind direction :
- d) Submerged area :
- e) Conditions of damage :

5-5 Lightening/Tornado:

a) Frequency :

b) Conditions of damage :

5-6 Damage from insects:

a) Frequency :

b) Kind of noxious insect:

c) Preventive measure :

5-7 Land subsidence:

a) Velocity :

b) Conditions of damage :

5-8 Infrastructure:

a) City water line (Please depict on the following figure)

b) Electric power line (ditto)

c) Telephone line (ditto)

d) Drainage (Public sewer line) (ditto)

e) Fuel gas supply (ditto)

6. Building Codes

- Please offer the following information

6-1 The newest edition of the Building Code

- a) Architectural Planning :
- b) Structural Planning :
- c) Electrical Planning :
- d) Fire Alarm System :
- e) Sanitary and Plumbing Planning:
- f) Mechanical (HVAC) Planning :

Note Applicable Standards

- BS : British Standard
- ASTB : American Society for Testing and Materials
- DIN : Deutsche Industrie Normen
- JIS : Japan Industrial Standard

6-2 Application for the Building Permission

- a) Authority concerned :
Section :
- b) Form of applications :
- c) Necessary period for applications:
- d) Necessary documents :

7. Electrical Power (City Power)

- Please offer the following information

7-1 Authority

name: _____

address & telephone No.: _____

7-2 Receiving system

_____ kV, 3 phases, _____ wires _____ Hz

number of service lines _____ lines

7-3 Secondary voltage of transformer (low-voltage)

_____ v/ _____ V, 3 phases, 4 wires

(_____ V, single phase for lighting)

(_____ V, 3 phase for motor)

7-4 Interrupting current at the receiving point (Short circuit current at the service connection point)

sym _____ kA at _____ kV

7-5 Typical diagram of the power receiving and substation system.

7-6 Present city power supply conditions around the building site.

Voltage regulation : Approx. + _____%, - _____%

Power failure : Frequency: _____ times/month

Duration: _____ hours

Cause of failure: _____

7-7 Electricity charge system (Electricity tariff)

Watt-hour charge : _____ IR _____ /KWH

Demand charge : _____ IR _____ /KVA

Other charge if any :

8. Telephone

- Please offer the following information

8-1 Authority

name: _____

address & telephone No.: _____

8-2 Required telephone line for the facilities: COL: _____ lines

Extension: _____ lines

8-3 Telephone call charge system: IR _____/call

9. Fire Alarm System

- Please offer the following information

9-1 Required fire alarm system : Manual (without detectors)
 Automatic (with detectors)

10. Sanitary and Plumbing Planning

10-1 Cold water supply : City water or
 Well

City water

- Authority

name: _____

address & telephone No. _____

Well water

- Annual situation

Yield _____ m³/day (1,000ℓ=1m³)

Fluctuation : Dry season (-) Surplus Lack

Rainy season (-) Surplus Lack

The type of well

- Location

- Depth

- Type

- Size diameter _____ mm

10-2 Quality of cold water

Please provide the analysis data of water on attached sheet-1.

Authority of water examination

name: _____

address & telephone No.: _____

10-3 Water distribution system

Elevated tank system or

Pressure pump system

Analysis of Water

Item	Characteristics		
	SITE	WHO	JAPAN
pH			5.8~8.6
Turbidity		—	2°
Residue on evaporation		—	500 ppm
Suspended solid		—	—
Total solid		—	—
Total dissolved solid		—	—
Total bacterial count (NOS/ml)		—	100 Nos/1cc
Total coliforms (NOS/ml)		MPN 10	0 No/50cc
Mercury Hg		—	0
Copper Cu		1.0 ppm	1.0 ppm
Iron Fe		0.3 ppm	0.3 ppm
Fluorine Compounds F		1.0 ppm	0.8 ppm
Lead Pb		0.1 ppm	0.1 ppm
Zinc Zn		5.0 ppm	1.0 ppm
Manganese Mn		0.1 ppm	0.3 ppm
Total hardness		100~500 ppm	300 ppm
Chlorine residual			—
Anion surface Active Agents			0.5 ppm
Phenoles			0.005 ppm
Arsenic (As)		0.2 ppm	0.05 ppm
Organic Phosphate			—
Ammonia		0.5 ppm	

11. Drainage

11-1 Drainage treatment system : Public sewerage system or

Treatment in the site

Public sewerage system

● Authority

name: _____

address & telephone No. _____

● The type of sewer line

● Location

● Type Combined or Separate of storm and sanitary
sewer

● Size: _____ diameter _____ mm

● Underground depth: _____

Treatment in the site

● Drainage treatment Septic tank or Mechanical treatment

● Disposal Penetrating into soil or

Discharging to river, etc.

13. Mechanical Planning

13-1 Design condition

a) Outdoor design conditions for HVAC system on site

- Rainy season

Dry bulb temperature : °C
Wet bulb temperature : °C (or %)
(or relative humidity)
Daily range : °C
Hottest month :

- Dray season

Dry bulb temperature : °C
Wet bulb temperature : °C (or %)
(or relative humidity)
Daily range : °C
Hottest month :

b) Indoor design conditions for HVAC system on site

- Rainy season

Dry bulb temperature : °C
Relative humidity : %

- Dray season

Dry bulb temperature : °C
Relative humidity : %

