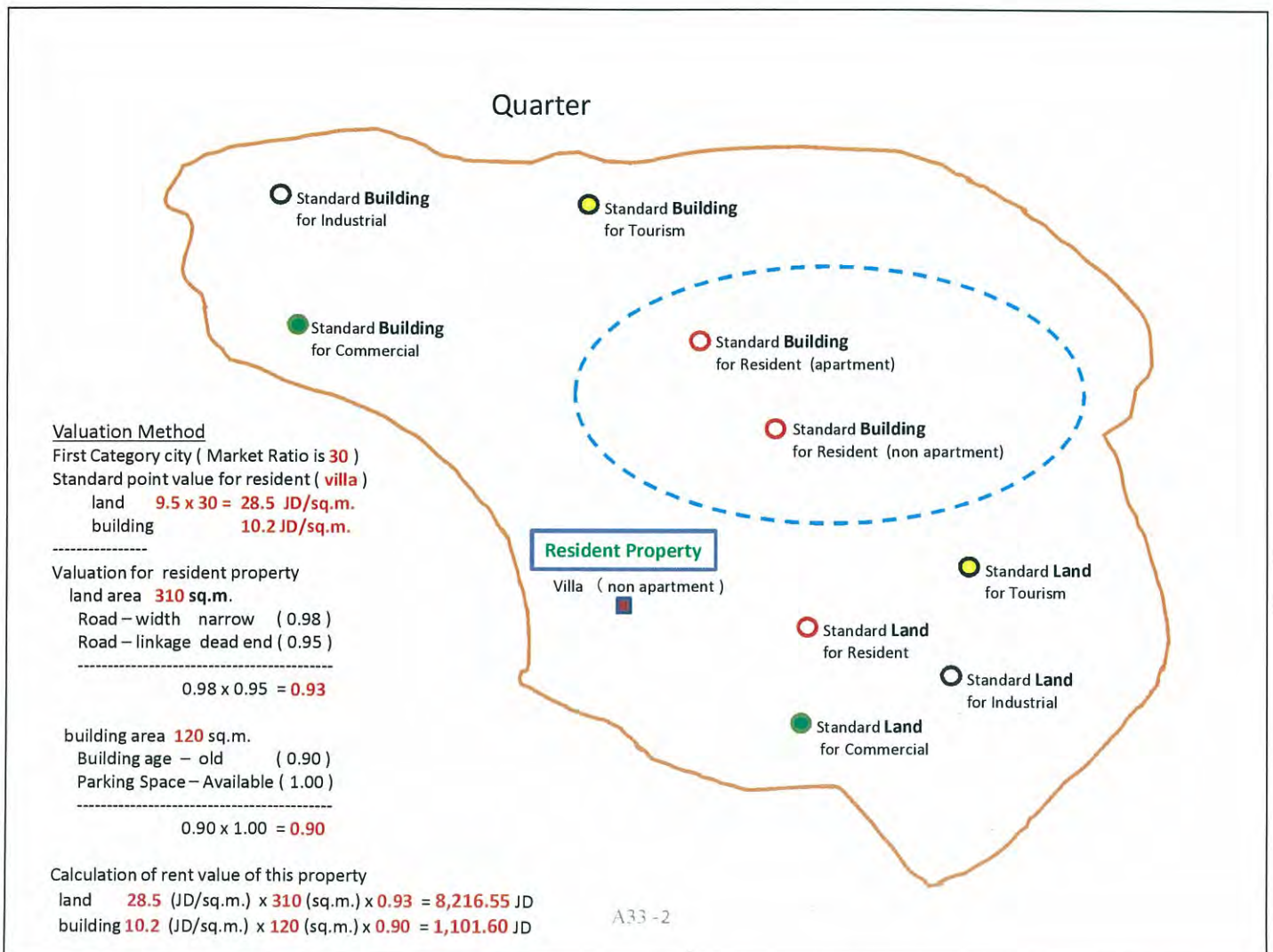


General System Design of P-TAX Modification to Operationalize the New Valuation Standards

A33 - 1



SETUP-1 Municipality Category

وزارة المالية / دائرة ضريبة الاملاك

Main Systems --> Evaluation --> Setup --> General Setup --> MUNICIPALITIES

دائرة ضريبة أملك محافظة رام الله و البيرة و النواء

No need to modify this program

MUN CODE	MUN DESC A	MUN DESC L	MUN CATEGORY	TABOOD CODING
60001	رام الله	Ramallah Municipity	أ	الغئة الأولى 16
60002	البيرة	Albirah Municipity	ب	الغئة الأولى
60003	بيتونيا	Betonia Municipity	ب	الغئة الثانية
60004	سلواد	Silwad Municipity	ب	الغئة الثانية
60005	دير ديوان	Der Debwan Municipity	ب	الغئة الثانية
60006	بیر زیت		ب	الغئة الثانية
60007			ب	الغئة الثانية

Update history should be saved

Municipality Category

- 1: First category city
- 2: Second category city
- 3: Third category city
- 4: Fourth category city

MUN CATEGORY	MCATEGORY DESC A	MCATEGORY DESC L
أ	الافتراضي	Default
ب	الغئة الأولى	First Class
ج	الغئة الثانية	Second Class
د	الغئة الثالثة	Third Class
هـ	الغئة الرابعة	Fourth Class

SETUP-2 Property type

Two columns for Arabic and English (same as other screens)

code	Property type
1	Commercial
2	Residential
3	Industrial
4	Tourism
5	Other
6	
7	
8	
9	
10	
11	
12	
13	
14	

Update history should be saved

SETUP-3 Matrix Factor

code	Indicators	Land or Building	Validity for Property type
1	Width	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
2	linkage	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
3	Pavement	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
4	Access to the Central of Municipality	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
5	Access to the Main Street or Road	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
6	Availability of Public Transportation	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
7	Proximity to Retail Stores	Land	<input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
8	Proximity to Public Facilities	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Tourism <input type="checkbox"/> Other
9	Water, Electricity, etc.	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
	Residential Environment	Land	<input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Tourism <input type="checkbox"/> Other
	Business Environment	Land	<input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Tourism <input type="checkbox"/> Other
12	Proximity to Nuisances	Land	<input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Tourism <input type="checkbox"/> Other
13	Frontage	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
14	Shape	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
15	Area	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
16	Topography	Land	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
17	Location of the Building on the Site	Building	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
18	Building Age	Building	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
19	Quality of Construction	Building	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Tourism <input type="checkbox"/> Other
20	Floor Location	Building	<input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Tourism <input type="checkbox"/> Other

Update history should be saved

SETUP-4 Valuation Matrix Table

Year: 2016 | Municipality Category: | Type of Property: Commercial
Residential
Industrial
Tourism

Find

		Valid/non-valid
Width	Standard	1.00 <input checked="" type="checkbox"/>
	Wide	1.05 <input checked="" type="checkbox"/>
	Narrow	0.95 <input checked="" type="checkbox"/>
	Slightly Inferior	0.95 <input type="checkbox"/> non-valid
Linkage	Standard	1.00 <input checked="" type="checkbox"/>
	Dead End	0.90 <input checked="" type="checkbox"/>
Pavement	Paved	1.00 <input checked="" type="checkbox"/>
	Unpaved	0.99 <input checked="" type="checkbox"/>
Access to the Center of Municipality	Standard	1.00 <input checked="" type="checkbox"/>
	Superior	1.02 <input checked="" type="checkbox"/>
	Inferior	0.98 <input checked="" type="checkbox"/>

Save

This is the image of adding data.

Update history should be saved

Width
Linkage
Pavement
Access to the Center of Municipality
.....

Linkage | Inferior | 0.96 | Add

SETUP-5 Standard Point Value

Year 2016 | 

Department 6 Ramallah
 City 60001 Ramallah
 Local 60001 Ramallah

First category

Block 10

Quarter	Property Category	Type of Property	Type of building	Standard value (ID/sq.m.)
01	Land	Commercial		9.0
		Residential		8.0
		Industrial		7.0
		Tourism		9.0
	Building	Commercial		8.0
		Residential	Apartment	10.0
			non Apartment	11.0
		Industrial		9.0
		Tourism		8.0

Update history should be saved

A33 -7

SETUP-6 Type of Valuation

code	Property_type
1	New valuation
2	Re valuation
3	objection
4	Etc_1
5	Etc_2
6	
7	
8	
9	
10	
11	
12	
13	
14	

Update history should be saved

A33 -8

Land valuation

Department: Block: Year:
 City: Quarter:
 Local: **First** Category city Parcel:

Other input data
 Valuation Date
 name of owner
 rented or (owner use, not rented)
 area info source
 type of valuation (pull down menu)
 etc

'New VS' programs run independent.
 'Old VS' programs will not be changed !!
 'New VS' and 'Old VS' run parallel.

Display Data

Commercial
 Residential
 Industrial
 Tourism

Type of Property:

Standard Value/ sq.m. X Area (sq.m.) X = Value of Land Annual Net Value

(x 0.06)

If area data exists, display area data.

A33-9

Print Valuation Record Sheet Land

Dept_NO:
 CITY_ID:
 BLOCK_NO:
 QUARTER_ID:
 PARCEL_NO: ---

Valuation Record Sheet (Draft)

1. Record Number	<input type="text"/>	3. Book Number	<input type="text"/>	9. Name of User	<input type="text"/>
2. Valuation Date	<input type="text"/>	4. Quarter Number	<input type="text"/>	10. Name of Lessee	<input type="text"/>
3. Stratum Name	<input type="text"/>	7. Municipality Category	<input type="text"/>	11. Reason for Valuation	<input type="text"/>
4. Municipality Name	<input type="text"/>	8. Name of Owner	<input type="text"/>	12. Owner and User is same	<input type="text" value="YES"/> <input type="text" value="NO"/> <input type="text" value="Vacant"/>

SUBJECT	Number	Area (m2)	Area info source	Usage category
Parcel	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="C"/> <input type="text" value="R"/> <input type="text" value="I"/> <input type="text" value="T"/>
Building	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="C"/> <input type="text" value="R"/> <input type="text" value="I"/> <input type="text" value="Act"/> <input type="text" value="I"/> <input type="text" value="T"/>
Floor	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="C"/> <input type="text" value="R"/> <input type="text" value="I"/> <input type="text" value="Act"/> <input type="text" value="I"/> <input type="text" value="T"/>
Flat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="C"/> <input type="text" value="R"/> <input type="text" value="I"/> <input type="text" value="Act"/> <input type="text" value="I"/> <input type="text" value="T"/>

LAND	BUILDING
01. Adjunct Road Width Standard = Wide = Narrow	01. Building Age Standard = Old = Eccentric Old
02. Linkage to the road Normal = Dead End	02. Quality of Construction Standard = Superior = Inferior
03. Pavement Asphalt paved = Unpaved	03. Floor Location 0 = 1st floor = 1 = 2 = 3 = Roof
04. Access to the Center of Municipality Standard = Superior	04. Upkeep and Maintenance Standard = Superior = Inferior
05. Access to the Main Street/Road Standard = Superior	05. Building Area Size Standard = Not Standard
06. Availability of Public Transportation Yes = No	06. Elevator Not Available = Available
07. Proximity to Retail store Standard = Superior	07. Parking Space Available = Not Available
08. Proximity to Public Facilities Standard = Superior	08. Location of the Building on the Site Standard = Superior = Inferior
09. Water, Electricity, Sewage, Telephone, etc Standard = Superior = Inferior	09. Ceiling Height Standard = Superior = Inferior
10. Residential Environment Standard = Superior = Inferior	
11. Business Environment Standard = Superior = Inferior	Valuator's Name: <input type="text"/>
12. Proximity to Nuisances Unaffected = Affected	Valuator's Signature: <input type="text"/>
13. Frontage Interior Lot = Corner Lot = Two Frontages = More than three Frontages	
14. Shape of Parcel Square = Slightly Odd-shape = Odd-shape = Extremely Odd-shape	
15. Area of Parcel Standard = Not Standard	
16. Topography Standard = Not Standard	

A33-10

Valuation data entry

First Category city **Residential** Property **Land**

Width	<input type="radio"/> Standard	<input checked="" type="radio"/> Wide	<input type="radio"/> Narrow
Linkage	<input type="radio"/> Standard	<input type="radio"/> Dead End	
Pavement	<input type="radio"/> Paved	<input type="radio"/> Unpaved	
Access to the Center of Municipality	<input type="radio"/> Standard	<input type="radio"/> Superior	<input type="radio"/> Inferior
Access to the Main Street/Road	<input type="radio"/> Standard	<input type="radio"/> Superior	<input type="radio"/> Inferior
Availability of Public Transportation	<input type="radio"/> Yes	<input type="radio"/> No	
Proximity to Retail Stores	<input type="radio"/> Standard	<input type="radio"/> Superior	<input type="radio"/> Inferior
Water, Electricity, etc.	<input type="radio"/> Standard	<input type="radio"/> Superior	<input type="radio"/> Inferior
Residential Environment	<input type="radio"/> Standard	<input type="radio"/> Superior	<input type="radio"/> Inferior
Frontage	<input type="radio"/> Inferior Lot	<input type="radio"/> Corner Lot	<input type="radio"/> 2 Frontages <input type="radio"/> 3 or 4 Frontages
Shape	<input type="radio"/> Standard	<input type="radio"/> Slightly Odd-shaped	<input type="radio"/> Odd-shaped <input type="radio"/> Extremely Odd-shaped
Area	<input type="radio"/> Standard	<input type="radio"/> Not Standard	
Topography	<input type="radio"/> Standard	<input type="radio"/> Not Standard	

.....

Save

A33 -11

Land valuation

Department	6	Ramallah	Block	10	Year	2016 ▼
City	60001	Ramallah	Quarter	0		
Local	60001	First Category city	Parcel	106		

Find

Building

Land

Display Data

- Commercial
- Residential
- Industrial
- Tourism

Type of Property
Residential | ▼

Get Standard value

Matrix value Data entry

automatic calculation

	Standard Value/ sq.m.		Area (sq.m.)		Value of Land	Annual Net Value
Land	9	X	1,820	X	15,069.60	904.18
						(x 0.06)

A33 -12

Building valuation

Department: Block: Year:
 City: Quarter:
 Local: **First** Category city Parcel:

Other input data
 Valuation Date
 name of owner
 rented or (owner use, not rented)
 area info source
 type of valuation (pull down menu)
 etc

Building

Land

Display Data

Flat Seq: Building No: Floor No: Flat No:

In case of Apartment,
 'Floor No.' and 'Flat No.' should be inputted

Commercial
 Resident (Apartment)
 Resident (Non-Apartment)
 Industrial
 Tourism

Type of Property

Standard Value/sq.m.

Area (sq.m.)

Value of Building

Annual Net Value

Building X X = (x 0.80)

A33 - 13

Print Valuation Record Sheet Building

Dept_NO:
 CITY_ID:
 BLOCK_NO:
 QUARTER_ID:
 PARCEL_NO: ---
 Flat Sequence:
~~Building NO: ---~~
~~Floor: ---~~
~~Flat No: ---~~

Valuation Record Sheet (Draft)

1. Record Number	<input type="text"/>	8. Block Number	<input type="text"/>	9. Name of user	<input type="text"/>
2. Valuation Date	<input type="text"/>	9. Quarter Number	<input type="text"/>	10. Name of Lessee	<input type="text"/>
3. Branch Name	<input type="text"/>	Municipality Category	<input type="text"/>	11. Reason for Valuation	<input type="text"/>
4. Municipality Name	<input type="text"/>	1. Name of Owner	<input type="text"/>	12. Owner and User is same	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> V/Dep

SUBJECT	Number	Area (m2)	Area info source	Usage category
Parcel	<input type="text"/>	<input type="text"/>	<input type="text"/>	= C = R = I = T
Building	<input type="text"/>	<input type="text"/>	<input type="text"/>	= C = R = I = R = A = I = T
Floor	<input type="text"/>	<input type="text"/>	<input type="text"/>	= C = R = I = R = A = I = T
Flat	<input type="text"/>	<input type="text"/>	<input type="text"/>	= C = R = I = R = A = I = T

LAND	BUILDING
01. Adjacent Road width = Standard = Wide = narrow	01. Building Age = Standard = Old = Extremely Old
02. Linkage to the road = Normal = Dead End	02. Quality of Construction = Standard = Superior = Inferior
03. Pavement = Asphalt paved = Unpaved	03. Floor Location = 0 = 1st below = 1 = 2 = 3 = Roof
04. Access to the Center of Municipality = Standard = Superior	04. Upkeep and Maintenance = Standard = Superior = Inferior
05. Access to the Main Street/Road = Standard = Superior	05. Building Area Size = Standard = Not Standard
06. Availability of Public Transportation = Yes = No	06. Elevator = Not Available = Available
07. Proximity to Retail Store = Standard = Superior	07. Parking space = Available = Not Available
08. Proximity to Public Facilities = Standard = Superior	08. Location of the Building on the site = Standard = Superior = Inferior
09. Water, Electricity, Sewage, Telephone, etc = Standard = Superior = Inferior	09. Ceiling Height = Standard = Superior = Inferior
10. Residential Environment = Standard = Superior = Inferior	
11. Business Environment = Standard = Superior = Inferior	
12. Proximity to Nuisances = Unaffected = Affected	
13. Frontage = Interior Lot = Corner Lot = Two Frontages = More than two Frontages	
14. Shape of Parcel = Square = Slightly Odd-shape = Odd-shaped = Extremely Odd-shape	
15. Area of Parcel = Standard = Not Standard	
16. Topography = Standard = Not Standard	

Valuator's Name:
 Valuator's Signature:

Print format is the same as 'Land'.

A33 - 14

Valuation data entry

First Category city **Residential** Property **Building**

Building	Building Age	<input type="radio"/> Standard(2000-)	<input checked="" type="radio"/> Old	<input type="radio"/> Extremely Old
	Quality of construction	<input type="radio"/> Standard	<input type="radio"/> Superior	<input type="radio"/> Inferior
	Floor Location	<input type="radio"/> Ground Floor(0)	<input type="radio"/> -1 or Below	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 or above <input type="radio"/> Roof
	Upkeep and Maintenance	<input type="radio"/> Standard	<input type="radio"/> Superior	<input type="radio"/> Inferior
	Building Area	<input type="radio"/> Standard	<input type="radio"/> Not Standard	
	Elevators	<input type="radio"/> Available	<input type="radio"/> Not Available	
	Parking space	<input type="radio"/> Available	<input type="radio"/> Not Available	
	Location of the Building on the Site	<input type="radio"/> Standard	<input type="radio"/> Good	<input type="radio"/> Bad

Save

A33 - 15

Building valuation

Department	<input type="text" value="6"/>	<input type="text" value="Ramallah"/>	Block	<input type="text" value="10"/>	Year	<input type="text" value="2016"/> ▼
City	<input type="text" value="60001"/>	<input type="text" value="Ramallah"/>	Quarter	<input type="text" value="0"/>		
Local	<input type="text" value="60001"/>	First Category city	Parcel	<input type="text" value="106"/>		

Find

Building

Land

Display Data

Flat Seq	Building No	Floor No	Flat No
<input type="text" value="105"/>	<input type="text" value="10"/>	<input type="text" value="2"/>	<input type="text" value="4"/>

- Commercial
- Resident (Apartment)
- Resident (Non-Apartment)
- Industrial
- Tourism

Type of Property
 | ▼

Get Standard value

Matrix value Data entry

automatic calculation

	Standard Value/ sq.m.		Area (sq.m.)		Value of Building		Annual Net Value
Building	<input type="text" value="14"/>	X	<input type="text" value="90.00"/>	X	<input type="text" value="1.02"/>	=	<input type="text" value="1,285.20"/>
							<input type="text" value="1028.16"/>
							(x 0.80)

A33 - 16

Valuation Record Sheet (Draft)

1. Record Number	<input type="text"/>	5. Block Number	<input type="text"/>	9. Name of User	<input type="text"/>
2. Valuation Date	<input type="text"/>	6. Quarter Number	<input type="text"/>	10. Name of Lessee	<input type="text"/>
3. Branch Name	<input type="text"/>	7. Municipality Category	<input type="text"/>	11. Reason for Valuation	<input type="text"/>
4. Municipality Name	<input type="text"/>	8. Name of Owner	<input type="text"/>	12. Owner and User is same	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Vacant

SUBJECT	Number	Area (m2)	Area info source	Usage category
Parcel	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> C <input type="checkbox"/> R <input type="checkbox"/> I <input type="checkbox"/> T
Building	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> C <input type="checkbox"/> R-Ind <input type="checkbox"/> R-Apt <input type="checkbox"/> I <input type="checkbox"/> T
Floor	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> C <input type="checkbox"/> R-Ind <input type="checkbox"/> R-Apt <input type="checkbox"/> I <input type="checkbox"/> T
Flat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> C <input type="checkbox"/> R-Ind <input type="checkbox"/> R-Apt <input type="checkbox"/> I <input type="checkbox"/> T

LAND

01. Adjunct Road Width = Standard = Wide = Narrow

02. Linkage to the road = Normal = Dead End

03. Pavement = Asphalt paved = Unpaved

04. Access to the Center of Municipality = Standard = Superior

05. Access to the Main Street/Road = Standard = Superior

06. Availability of Public Transportation = Yes = No

07. Proximity to Retail Store = Standard = Superior

08. Proximity to Public Facilities = Standard = Superior

09. Water, Electricity, Sewage, Telephone, etc = Standard = Superior = Inferior

10. Residential Environment = Standard = Superior = Inferior

11. Business Environment = Standard = Superior = Inferior

12. Proximity to Nuisances = Unaffected = Affected

13. Frontage = Interior Lot = Corner Lot = Two Frontages = More than three Frontages

14. Shape of Parcel = Square = Slightly Odd-shape = Odd-shaped = Extremely Odd-shape

15. Area of Parcel = Standard = Not Standard

16. Topography = Standard = Not Standard

BUILDING

01. Building Age = Standard = Old = Extremely Old

02. Quality of Construction = Standard = Superior/OS = Inferior

03. Floor Location = 0 = 1st floor below = 1 = 2 = 3 = Roof

04. Upkeep and Maintenance = Standard = Superior = Inferior

05. Building Area Size = Standard = Not Standard

06. Elevator = Not Available = Available

07. Parking Space = Available = Not Available

08. Location of the Building on the Site = Standard = Superior = Inferior

09. Ceiling Height = Standard = Superior = Inferior

Valuator's Name

Valuator's Signature

A33 - 17

END

2015/11/25

•add 'Annual Net Value' to P8, P11, P12, P15

GDPT J-PVP's Action Plan for 'Initializing GIS¹ for GDPT'			
Purpose	To enhance technical capacity of valuers on GIS through initializing GIS in valuation activities of GDPT		
Specifications	a) Parameters: necessary data for valuation and other information (to be determined). b) Map data including shapefiles of buildings, parcels, blocks/quarters, physical plan (if available) and others. c) Raster data including aerial photography and block maps (if not digitalized). d) Visualization and retrieval of a) to c).		
Target Area	Beitounia municipality.		
Organizational arrangement	a) Management Unit: GIS Working Group in GDPT TDMMU Head: Director General Member: Head of IT Dept., Valuation Dept., and GDPT GIS team as below. b) Production Unit: GDPT GIS team Head: GIS Engineer assisted by Valuation Standards Facilitator (J-PVP) Member: GIS Assistant(J-PVP), Database Assistant(J-PVP) and Valuers. c) Support Unit: IT Department, Valuation Department, and others.		
Development partners	MoLG ² , PLA, Municipalities, Notary public, Electric company, relevant organizations and individuals.		
Work place(s)	GDPT (base station), MoLG, Municipalities.		
Tentative Timeframe	At least 36 weeks in total a) Planning Stage 1 week b) Preparation Stage 3 weeks c) Digital Imaging Creation Stage 12 weeks d) GeoDatabase Integration Stage 12 weeks e) Examination Stage 2 weeks f) Modification Stage 2 weeks g) Pilot Action Compilation Stage 4 weeks		
Inputs	GDPT	JICA	
	(1) Letter of Intent	(1) Human resources	
	An official note to be issued by GDPT addressing to JICA with cc to JICA Project Office which outlines basic institutional arrangements including organizational and budgetary setting-up to be required for the establishment, operation and management of a GIS unit or equivalent entity within GDPT's organizational structure.	JICA Expert	1
		GIS Engineer ³	1
		GIS Assistant	2
		(2) Equipment	
		Desktop PC with 2 monitors	6 ⁴
		External Hard Disk	6
		ArcGIS	6
	AutoCAD	6	
MS Office	6		
Adobe CS	6		
(2) Human resources	Laser Measure	5	
Valuers with basic operation skills to use PC and Ms-office		2	
(3) Office space for production unit.			

¹ 'Initializing GIS' can be defined as a module which is created to start developing GDPT-GIS focusing on a field of valuation activity with a wishful intention of expanding it little by little in the future for Palestine.

² Relevant works related to exchange of data with MoLG and PLA is of significant importance for attaining the purpose. Such works involve exchange of views on data for elaborating data for the purpose set as above.

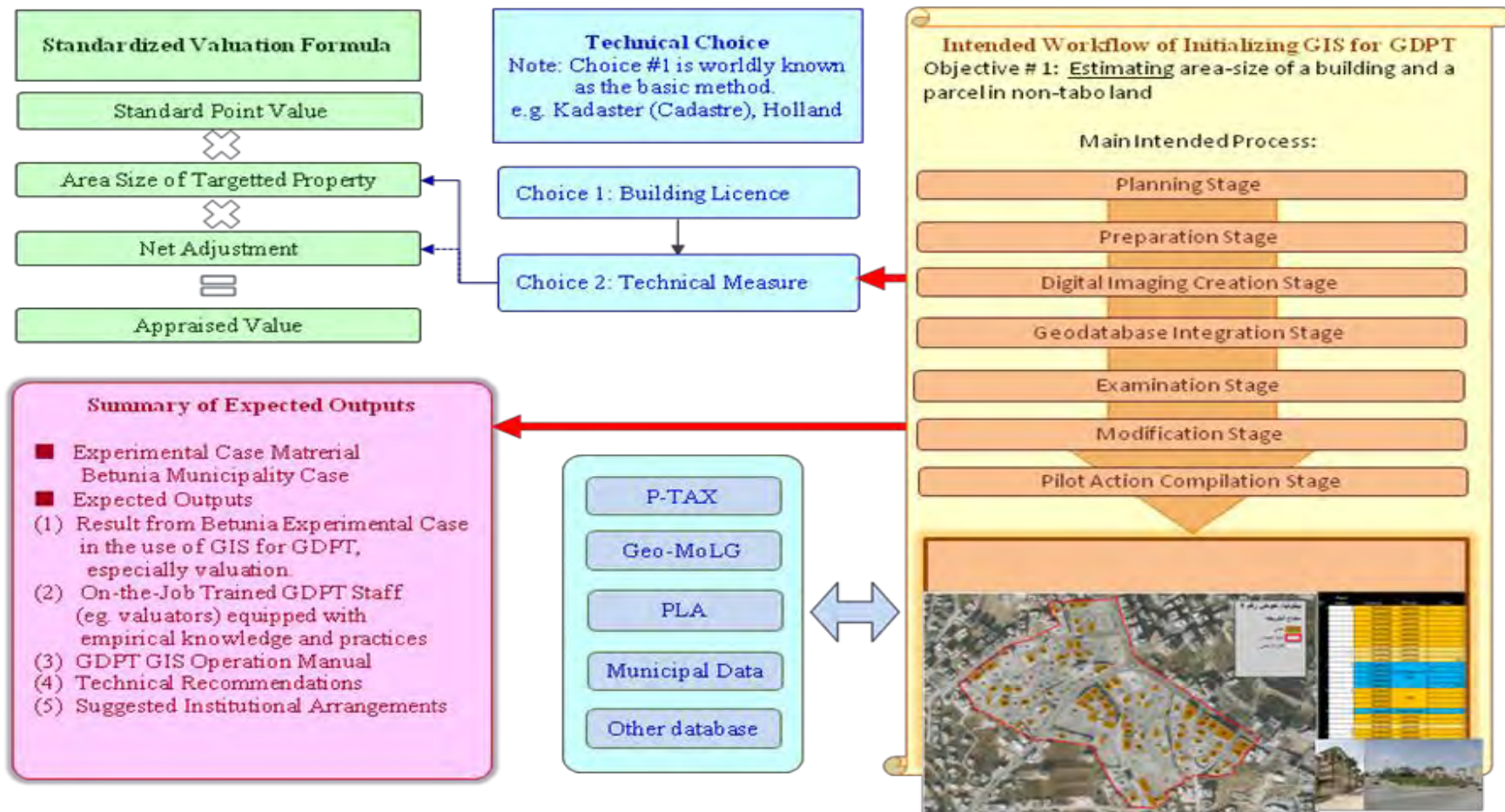
³ GIS Engineer shall be assisted by the Valuation Standards Facilitator (VSF). Yet VSF is not listed in the above item 'Human Resources' as VSF will work as overall facilitation.

⁴ A total quantity with 6 is accounted for 1 for VSF, 1 for GIS engineer, 2 for GIS assistants and 2 for valuers, while the number of laser measure is 5 excluding one for VSF.

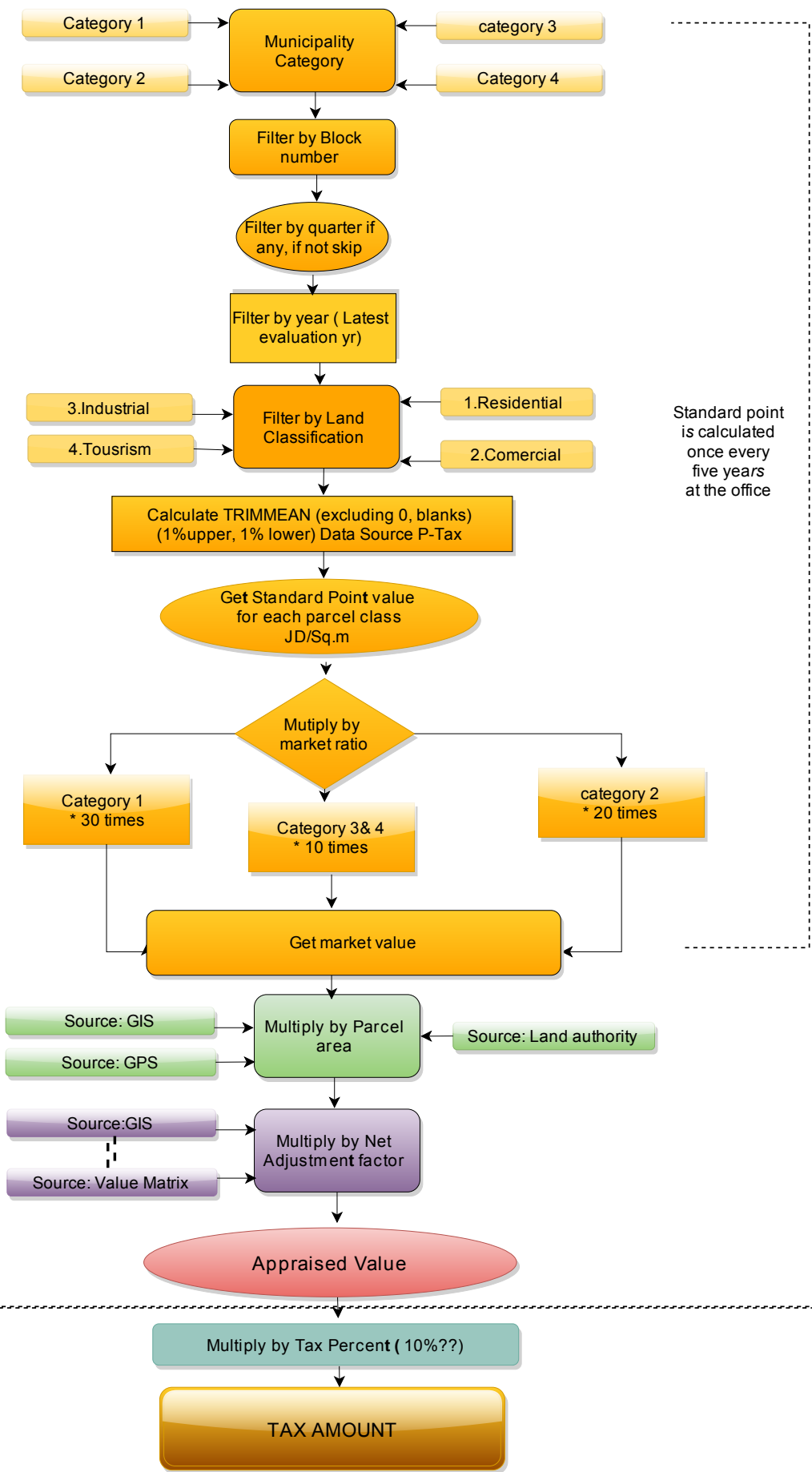
Main Procedures

- a) Planning Stage:
 - 1) Evaluation and finalization of this action plan.
 - 2) Specification/Needs determination and finalization.
 - 3) Monitoring of proceedings.
 - 4) Other decision-makings.
- b) Preparation Stage:
 - 1) Set up working environment.
 - 2) Acquire existing physical plan, existing GIS data, block maps and others.
 - 3) Digitalize 2) if not digitalized.
 - 4) Place 2) with geophysical coordinates.
- c) Digital Imaging creation:
 - 1) Creation of base map.
 - 2) Creation of block / quarter shape-files.
 - 3) Creation of parcel shapefiles.
 - 4) Creation of building shapefiles.
 - 5) Creation of other necessary shapefiles.
 - 6) Examination of basemap and shapefiles.
- d) GeoDatabase creation:
 - 1) Creation of serial ID code for GeoDatabase attribute table.
 - 2) Transfer and examination of attributes from GDPT database.
 - 3) Extraction of building area readings.
 - 4) Creation of analyses tools.
 - 5) Examination of GeoDatabase.
- e) Examination Stage:
 - 1) Error checks, faults extraction and correction.
 - 2) Operation manual drafting.
 - 3) Presentation to Management Unit.
 - 4) Acquire demand for modification.
- f) Modification Stage:
 - 1) Modification of the system according to e 4).
- g) Pilot Action Compilation Stage:
 - 1) Training for Valuators.
 - 2) GIS Operation manual finalization.
 - 3) Preparation of technical recommendations for planning an action for dissemination

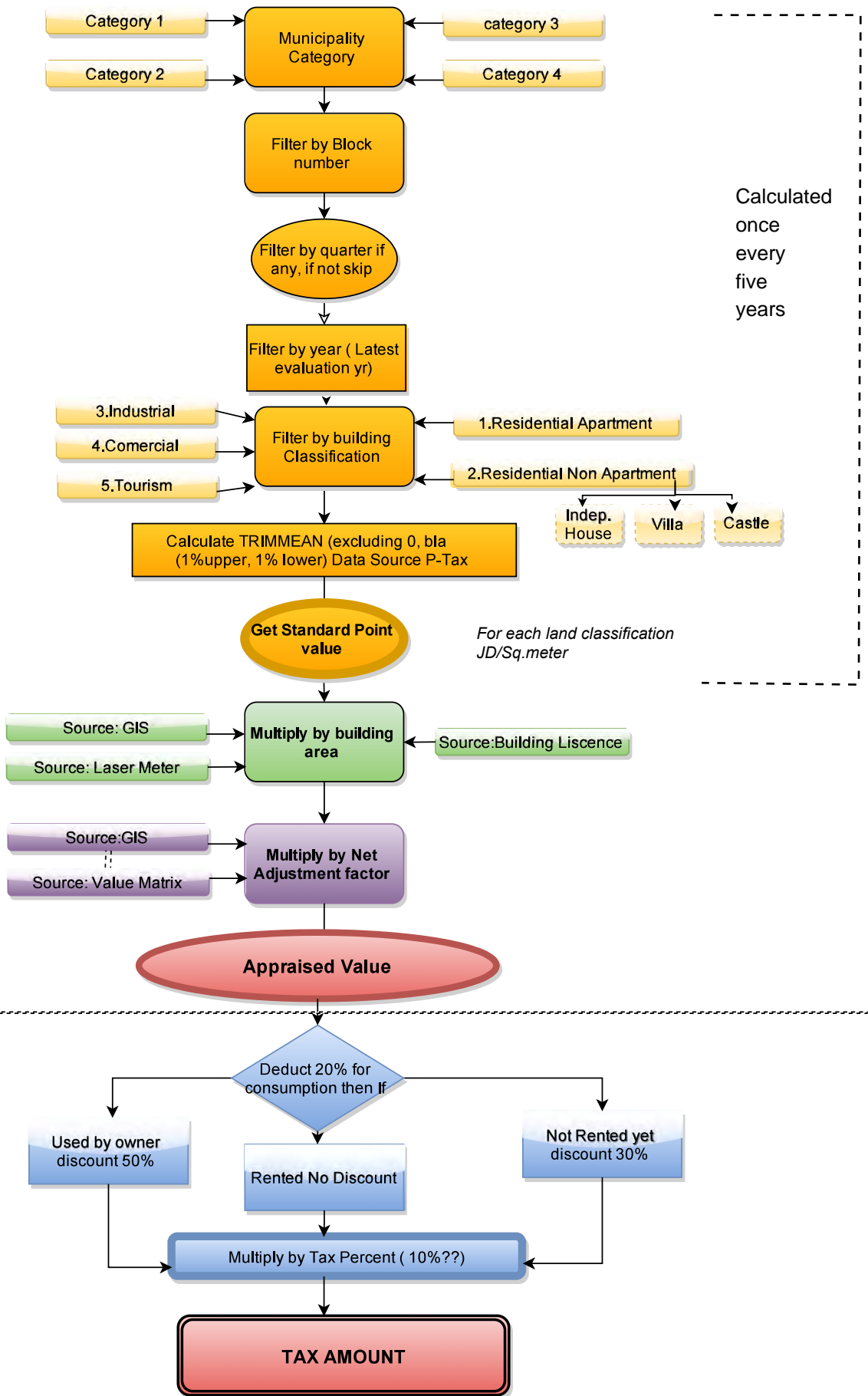
Illustrated Diagram of a Scope of Work for 'Initializaing GIS for GDPT' in the Operationalization of Valuation Standards



Parcel Valuation Process



Building Valuation Process





Ministry of Finance
General Directorate of Property Tax
GDPT



The Incorporation of GIS\GPS Techniques
Within the Framework of the
Enhanced Property Valuation System in Palestine

Diagnostic Report

Jamal NUMAN

Tuesday, August 23, 2016

Diagnostic Report_Property Valuation System in Palestine_JICA_GDPT_Jamal NUMAN_11.docx

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1 Introduction

For the purpose of the JICA-Palestine Valuation Project (J-PVP) addressed to the General Directorate for Property Tax (GDPT) that aims at improving the current financial system, Betonia, within the boundary of the approved urban master plan, is selected as pilot area as shown in Figure 1.

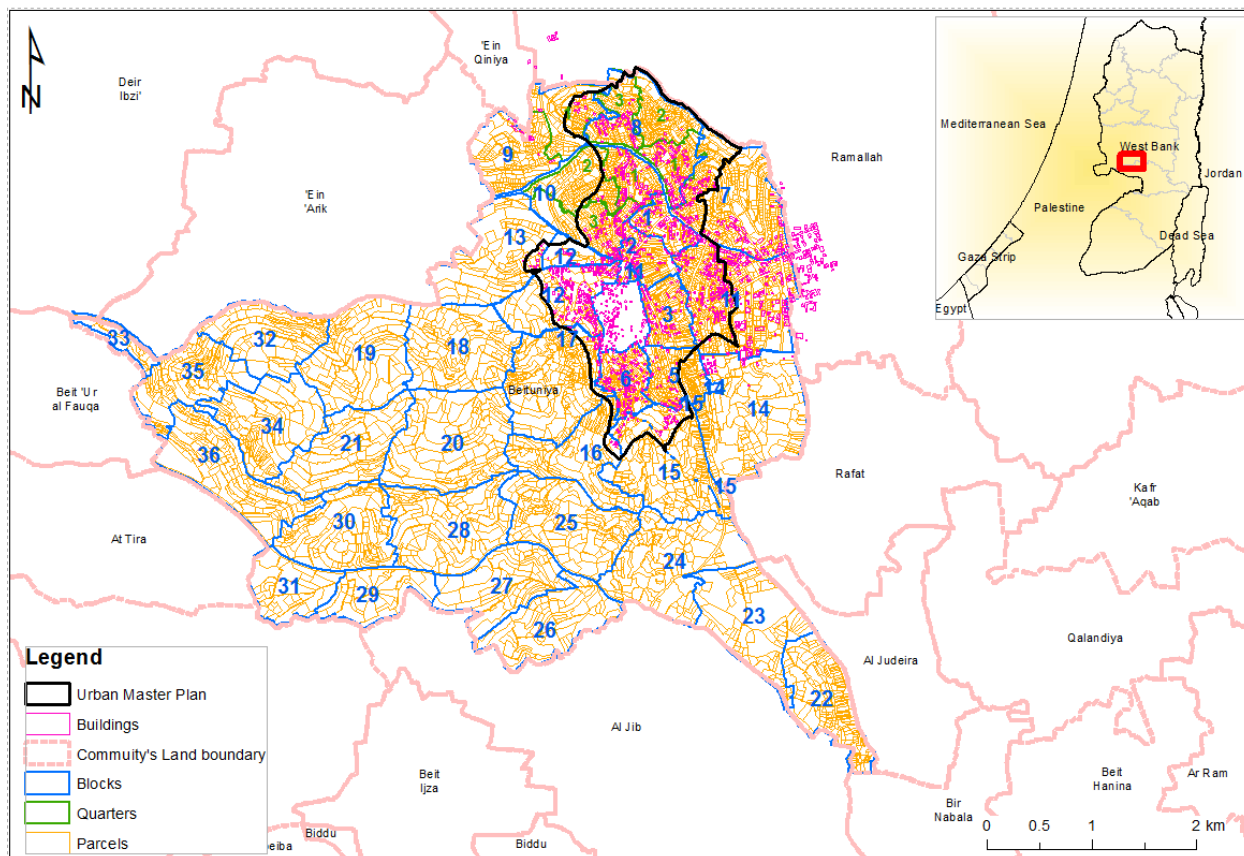


Figure 1: Pilot area

The entire area of Betonia lands is about 23 km where the area of its urban master plan is about 4 km². Table 1 includes important information about its cadaster and improvements structure

Item	Total	Inside Urban Master Plan	Outside Urban Master Plan
Number of blocks		37	19
Number of parcels		3,061	3,640
Number of buildings		1800	323
Number of units (flats)		14,000	4,208
Number of parcel owners		8,708	2,203
Number of buildings owners			
Number of units (flats) owners		12,431	4,637

Table 1: Cadaster structure, improvements and owners in Betonia.

In the same context, it should be kept in mind that the findings of JPVP in Betonia are intended to be disseminated at the national level. The table below gives some idea about the data size at the level of West Bank.

Item	Number of Records in PTAX
Parcels	810,803

Parcels' Owners	473,772
Parcels' Tax Payers	353,676
Estimated Parcels	262,692
Units (Estimated) in PTAX	262,656
Buildings	179,814
Units' Owners (the owner is also the tax payer)	129,293

Table 2: Cadaster structure, improvements and owners in West Bank.

2 GeoPTAX

Within the scope of J-PVP, it is aimed to develop the GeoPTAX application in order to bridge the gap between the spatial and tabular data and thus to better understand patterns about property valuation and taxation data including all its relevancies. At the present, efforts are exerted to achieve the following:

1. Empowering valuers with visual spatial context regarding the data (parcels\buildings) traditionally accommodated in tabular fashion with no locational dimension (Beta version of GeoPTAX is available by now). The direct advantages are:
 - a. The spatial component provides mature insight and portrays patterns that are hidden within the table format
 - b. The GIS\GPS integration delivers proper tool for the valuers to better identify locations of properties while working in the field (3G is assumed to be available by next July)
 - c. Marking the buildings\units that are under construction to give them priority for visit in the next year. GeoPTAX can highlight these buildings\units and propose plan for visit.
2. Developing the PTAX database to better respond to the JPVP approach to estimate sale and rent values by adding new fields and relations.
3. The GeoPTAX enables displaying the sale\rent values obtained from the PTAX database and JPVP in terms of maps and thus sale\rent values are linked with their features in the ground that provides an exceptional opportunity to double check the estimated values for lands and buildings.
4. The GeoPTAX offers a good way to identify lands\buildings that are physically existing on the reality but have no records in the PTAX database. On other words, GeoPTAX guarantees that there are no missing taxable entities, and thus tax cannot be avoided. However, this depends on the availability of recent orthophoto with high resolution (10 cm)
5. In addition to the JPVP approach to estimate the sale\rent values, the two methods below can be considered to avoid heavy data entry particularly when it comes to lands
 - a. GIS with Statistical method such as Multiple Regression Analysis (MRA)
 - b. GIS with Artificial method such as Neural Network (ANN)

3 Taxation formula: PTAX and J-PVP

In this section, it is intended to compare between the taxation formulas applied in the PTAX and J-PVP. However, the difference refers to methods by which the sale\rent values are estimated but not the taxation formula itself.

According to the PTAX, taxation equation for **lands** is written as below:

$$T_p = 10\% * 6\% * S * A \quad (1)$$

Where T_p is the taxation value for a parcel (p) in JD, 10% is the taxation percent out of the rent value of the land, 6% is the percent that is multiplied by the sale value of land (JD/m²) to produce the net rent value (*Net Rent value for a parcel* = 6% * S), S is the **sale** (market) value of the land in JD/m² and A is the area of the land.

In return, the PTAX taxation equation for **buildings** is expressed as below:

$$T_u = 17\% * 80\% * E * R \quad (2)$$

Where T_u is the taxation value for a unit (u) in a building in JD, 17% is the taxation percent out of the net rent value of a unit, 80% is a percent multiplied by the rent value to obtain the net rent value (20% is deducted for maintenance), E is a factor that takes care of the occupants of unit (u); if the unit is occupied by the owner, then E=50%, if u is rented, then E=100%, if the unit is vacant, then E=70%, R is the **rent** value for the unit in JD/year.

According to JPVP approach, the **land** taxation equation is formulated as below

$$T_p = 10\% * 6\% * K * M * S * A \quad (3)$$

Where T_p is the taxation value for a parcel (P) in JD, 10% the taxation percent out of the rent value of the land, 6% is the percent that is multiplied by the sale value of land (JD/m²) to obtain the rent value (*Rent value for a parcel* = 6% * S), K is a coefficient that accounts for parcel characteristics (location, utilities, etc.) and can be obtained by multiplying the k coefficient of each variable ($K=k_1*k_2*...k_n$) as shown in Table 3 (the values of K for residential areas ranges from 0.45 to 1.2), M is a constant that considers the classification of the municipality: if the classification of the municipality is grade 1, then M=30, if the classification is grade 2 then M=20, if the classification is Grade 3 or 4 then M=10, S is the trim average of the **sale** values stored in PTax of all parcels of similar land use contained within the same block\quarter in JD/m² and A is the area of the land. Mathematically, S can be expressed as below:

$$S = \frac{\sum_{l=1}^n S_{lij}}{n} \quad (4)$$

Where s_{lij} is the sale value (stored in the PTAX database) for the l^{th} parcel with i^{th} land use in the j^{th} block (or quarter if any), and n is the number of parcels in the j^{th} block (or quarter if any) with same land use.

Initially, it should be indicated that M value has calculated by converting the sale values stored in the ledger of GDPT to their actual values in the real market. Mathematically, it can be expressed as follows:

$$M = \frac{\sum_{l=1}^n \left(\frac{S_{ai}}{S_{ri}} \right)}{n} \quad (5)$$

Where, S_{ai} is the actual sale value of i^{th} parcel, S_{ri} is its corresponding sale value stored in the registered

Category	Variable	Class	Coefficient (k)				
			Residential	Commercial	Industrial	Tourism	
Road	1	Width (k1)	Standard	1	1	1	1
			Wide	1.02	1.02	1.02	1.02
			Narrow	0.98	0.98	0.98	0.98
	2	Linkage (k2)	Standard	1	1	1	1
			Dead End	0.95	0.95	0.95	0.95
	3	Pavement (k3)	Paved	1	1	1	1

		Unpaved	0.98	0.98	0.98	0.98	
Access	4	Access to the Center of Municipality (k4)	Standard	1	1	1	1
			Superior	1.02	1.02	1.02	1.02
5	5	Access to the Main Street/Road (k5)	Standard	1	1	1	1
			Superior	1.02	1.02	1.02	1.02
6	6	Availability of Public Transportation (k6)	Yes	1	1	1	1
			No	0.9	0.9	0.9	0.9
7	7	Proximity to Retail Stores (k7)	Standard	1	1	1	1
			Superior	1.02	1.02	1.02	1.02
8	8	Proximity to Public Facilities (k8)	Standard	1	1	1	1
			Superior	1.02	1.02	1.02	1.02
9	9	Water, Electricity, Sewage, Telephone, etc. (k9)	Standard	1	1	1	1
			Superior	1.05	1.05	1.05	1.05
			Inferior	0.95	0.95	0.95	0.95
10	10	Residential Environment (k10)	Standard	1	1	1	1
			Superior	1.02	1.02	1.02	1.02
			Inferior	0.98	0.98	0.98	0.98
11	11	Commercial Environment (k11)	Standard				
			Superior				
			Inferior				
12	12	Proximity to Nuisances (k12)	Unaffected	1	1	1	1
			Affected	0.95	0.95	0.95	0.95
13	13	Frontage (k13)	Interior Lot	1	1	1	1
			Corner Lot	1.02	1.02	1.02	1.02
			2 Frontages	1.01	1.01	1.01	1.01
			3 or 4 Frontages	1.03	1.03	1.03	1.03
14	14	Shape (k14)	Standard	1	1	1	1
			Slightly Odd-shaped	0.95	0.95	0.95	0.95
			Odd-shaped	0.85	0.85	0.85	0.85
			Extremely Odd-shaped	0.7	0.7	0.7	0.7
			Standard	1	1	1	1
15	15	Area (k15)	Not Standard	0.9	0.9	0.9	0.9
			Standard	1	1	1	1
16	16	Topography (k16)	Standard	1	1	1	1
			Not Standard	0.9	0.9	0.9	0.9

Table 3: K-coefficient that takes care of parcel characteristics such as location, topography and utilities.

Factors	Land	Options	Category 1				Category 2				Category 3				Category 4			
			Residential	Commercial	Industrial	Tourism	Residential	Commercial	Industrial	Tourism	Residential	Commercial	Industrial	Tourism	Residential	Commercial	Industrial	Tourism
Road width	Standard	Wide	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		Narrow	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.01	1.01	1.01	1.02	1.02	1.01	1.01	1.01
			0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.98	0.99	0.99	0.99	0.99
Frontage	Interior Lot	Corner Lot	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		Two Frontages	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.01	1.02	1.02	1.02	1.02	1.01	1.02
		More than three Frontages	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
			1.03	1.03	1.03	1.03	1.02	1.03	1.02	1.03	1.02	1.03	1.01	1.03	1.02	1.03	1.01	1.03
Location	Standard	Superior	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		Inferior	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
			0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shape of Parcel	Standard	Not Standard	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
			0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.90	0.90	0.95	0.90	0.90
Topography	Standard	Not Standard	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
			0.90	0.90	0.90	0.90	0.92	0.92	0.95	0.92	0.95	0.95	0.97	0.95	0.95	0.95	0.97	0.95

In return, the taxation equation is written as below:

$$T_u = 17\% * 80\% * E * K * R * A \tag{6}$$

Where T_u is the taxation value for a unit (u) in a building in JD, 17% is the taxation percent out of the net rent value of a unit, 80% is a percent multiplied by the rent value to obtain the net rent value (20% is deducted for maintenance), E is a factor that takes care of the occupants of unit (u); if the unit is occupied by the owner, then E=50%, if u is rented, then E=100%, if the unit is vacant, then E=70%, K is a coefficient that accounts for building characteristics (location, condition,

utilities, etc.) and can be obtained by multiplying the k coefficient for each variable ($K=k_1*k_2*...k_n$) as shown in Table 4, R is the trim average of the **rent** values (stored in PTAX) of all units of similar land use in same block\quarter in JD/m², A is the area of the unit. Mathematically, R can be expressed as below:

$$R = \frac{\sum_{u=1}^n r_{uij}}{n} \tag{7}$$

Where r_{uij} is the rent value (stored in the PTAX database) for the u^{th} unit with i^{th} use in the j^{th} block (or quarter if any), and n is the number of units in the j^{th} block (or quarter if any) with same land use.

Variable	Class	Coefficient (k)			
		Residential	Commercial	Industrial	Tourism
1 Building Age (k1)	Standard	1	1	1	1
	Old	0.9	0.9	0.9	0.9
	Extremely Old	0.8	0.8	0.8	0.8
2 Quality of Construction (k2)	Standard	1	1	1	1
	Superior	1.05	1.05	1.05	1.05
	Inferior	0.95	0.95	0.95	0.95
3 Floor level (k3)	Ground Floor (0)	1	1		1
	-1 or below	0.95	0.95		0.8
	1	0.95	1		0.9
	2	0.95	1		0.8
	3 or above	1.05	1.05		0.7
4 Upkeep and Maintenance (k4)	Standard	1	1	1	1
	Superior	1.02	1.02	1.02	1.02
	Inferior	0.98	0.98	0.98	0.98
5 Building Area (k5)	Standard	1.1	1	1	1
	Not Standard	1	0.9	0.9	0.9
6 Elevator (k6)	Available	1.1	1.1	1.1	1.1
	No Available	1	1	1	1
7 Parking Space (k7)	Available	1	1	1	1
	No Available	0.95	0.9	0.9	0.9
8 Location of the Building on the Site (k8)	Standard	1	1	1	1
	Good	1.05	1.05	1.05	1.05
	Bad	0.95	0.95	0.95	0.95
9 Ceiling Height (k9)	Standard		1	1	1
	High		1.05	1.05	1.05
	Low		0.95	0.95	0.95

Table 4: K-coefficient that takes care of building characteristics such as location, condition and utilities.

Factors	Options	Category 1				Category 2				Category 3				Category 4			
		Residential	Commercial	Industrial	Tourism	Residential	Commercial	Industrial	Tourism	Residential	Commercial	Industrial	Tourism	Residential	Commercial	Industrial	Tourism
Building	Options																
Building Age	Standard	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Old	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Extremely Old	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Quality and Condition	Standard	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Superior	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	Inferior	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Floor Location	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	-1 or below	0.95	0.80	1.00	0.80	0.95	0.90	1.00	0.90	0.97	0.90	1.00	0.90	0.97	0.90	1.00	0.90
	1	1.00	0.90	1.00	0.90	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95
	2	1.00	0.80	1.00	0.80	1.00	0.90	1.00	0.90	1.00	0.90	1.00	0.90	1.00	0.90	1.00	0.90
	3 or above	1.05	0.70	1.00	0.70	1.03	0.80	1.00	0.80	1.02	0.85	1.00	0.85	1.02	0.85	1.00	0.85
	Roof	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Services	Standard	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	Superior	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	Inferior	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Elevator	Available	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
	Not Available	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Apparently, the current PTAX database need to be enhanced to include information about unit area and unit use.

3.1 Example 1

Calculate the taxation value levied on parcel#10, block # 1 Betonia shown in Figure 2 according to the current approach.

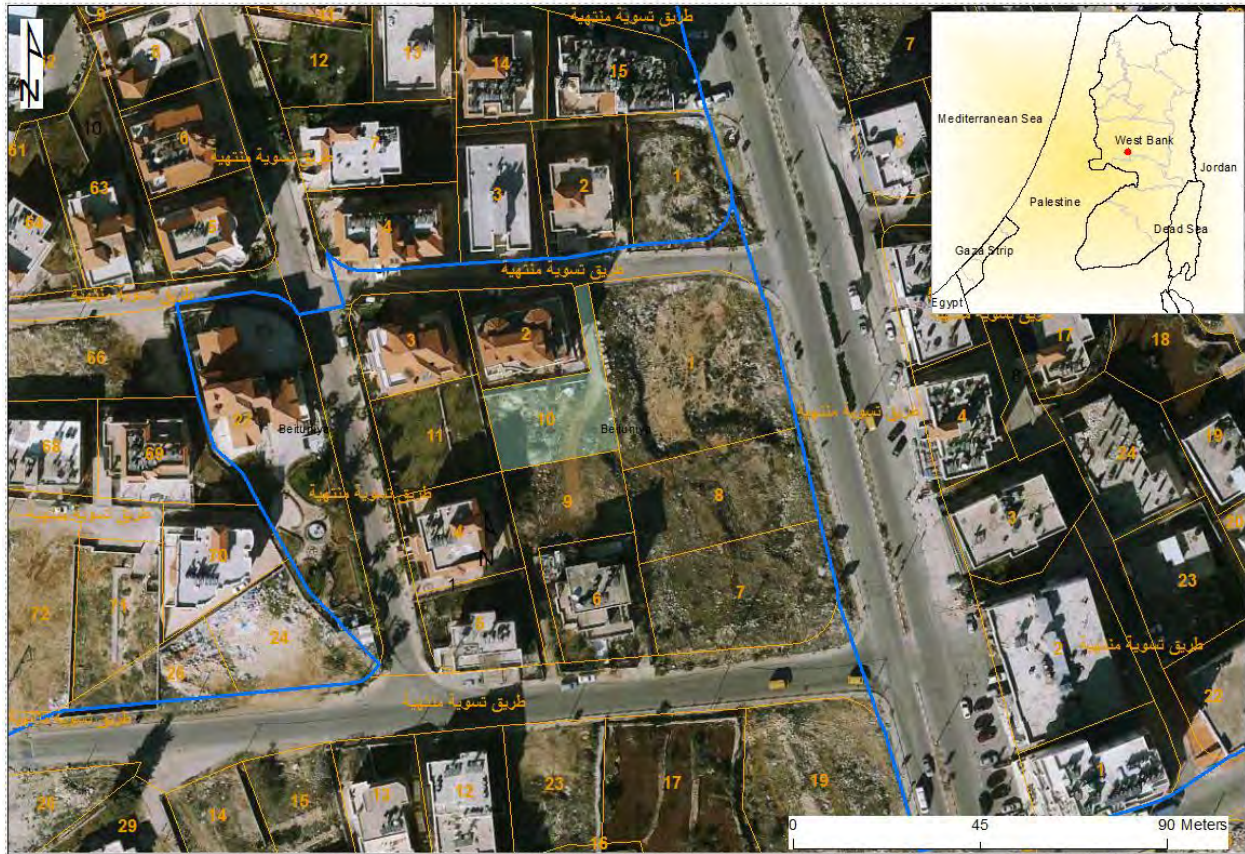


Figure 2: location of parcel number 10, block number 1 in Betonia.

Solution

The area of the parcel #10 (Figure 3): is **654 m²**

The sale value is **6 JD/m²**

The total sale price of the parcel = $6 \times 654 = \mathbf{3,924 \text{ JD}}$

The rent value of the parcel = $6\% \times 3924 = \mathbf{235 \text{ JD}}$

The taxation value of the parcel = $10\% \times 235 = \mathbf{23 \text{ JD}}$

الأظمة الرئيسية -- خريطة الاملاك -- التخمين -- السجلات -- تخمين خريطة الاملاك

معلومات من السجل

المكتب: 6 دائرة ضريبية أطلك رام الله و البيرة
 المدينة / القرية: 60003 بيتونيا
 المحلة: 60015 تسوية بيتونيا
 الحوض: 1 المنطار ويتر الشمساس

الحج: 0
 رقم القطعة: 10
 الرقم السابق: 19/5
 المساحة: 654

سجلات التخمين: 0
 الحالة: فعال
 نوع التسجيل: 2

الأيلولة

لمشاهدة إجمالي قيم التخمين للسنوات (CTRL+H)

تخمين الأرض | تخمين البناء | تخمين البناء الاخير

السنة: 2010
 المساحة متر المربع: 654
 سعر المتر: 6.00
 قيمة الأرض: 3924
 تخمين الأرض: 235
 ملاحظات:

المالكين

رقم المالك	اسم المالك	حصة المالك	حصة المالك /طابو
12852	خليل اسعد خليل العمري	1	1/3
14532	راسم اسعد خليل العمري	1	1/3
41612	صوفى اسعد خليل العمري	1	1/3

الحالة: فعال
 مجموع التخصيص: 3
 ملاحظات:

Figure 3: Sale value and estimated valuation for parcel number 10, block number 1 in Betonia in 2010.

As the parcel is owned by three, then the taxation value is divided by three

$$\text{Taxation per owner} = 23/3 = \underline{7.8 \text{ JD}}$$

HULUL

المعلومات عن المكلف

المكتب: 6 دائرة ضريبية أطلك رام الله و البيرة
 المالك: 12852 خليل اسعد خليل العمري
 المدينة: 60003 بيتونيا

سجل الضريبة

الحوض	الحج	القطعة	البنية	الشفقة	الطابق	السنة	قيمة التخمين	قيمة الضريبة	المبلغ المدفوع	الخصم	الغرامة	اشجار	الإهفاء	المعلنة	الديون	المجموع مدفوع
1	0	10				2015	78.333	7.833	7.833	0	0	0	0	0	7.833	
1	0	9				2015	80.333	8.033	8.033	0	0	0	0	0	8.033	
1	0	9				2014	80.333	8.033	6.426	0	0	0	0	0	8.033	
1	0	10				2014	78.333	7.833	6.266	0	0	0	0	0	7.833	
1	0	10				2013	78.333	7.833	6.266	0	0	0	0	0	7.833	
1	0	9				2013	80.333	8.033	6.426	0	0	0	0	0	8.033	
1	0	9				2012	80.333	8.033	6.426	0	0	0	0	0	8.033	
1	0	10				2012	78.333	7.833	6.266	0	0	0	0	0	7.833	
1	0	10				2011	78.333	7.833	8.616	0	0.783	0	0	0	8.616	
1	0	9				2011	80.333	8.033	8.836	0	0.803	0	0	0	8.836	
1	0	10				2010	78.333	7.833	9.4	0	1.567	0	0	0	9.4	
1	0	9				2010	80.333	8.033	9.64	0	1.607	0	0	0	9.64	
المجموع																
99.956																
0.000																
0.000																
0.000																
4.760																
0.000																
90.434																
95.196																
تسلسل الشقة																

Figure 4: Taxation values imposed on parcel number 10 block number 1 in Betonia in 2010 and other years. The tax is equally distributed on three owners.

3.2 Example 2

Calculate the taxation value levied on parcel#10, block # 1, Betonia shown in Figure 6 according to the JPVP approach.

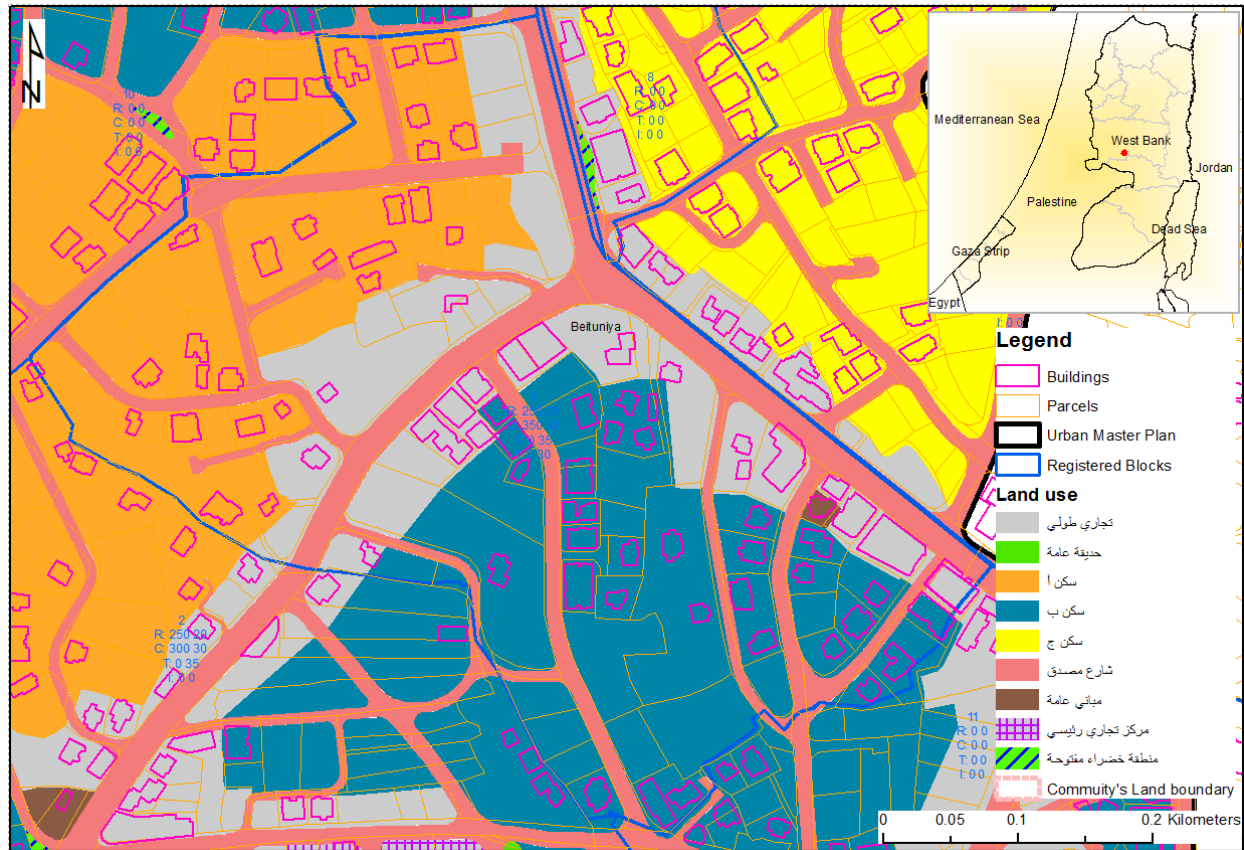


Figure 5: The land use in block one according to the urban master plan of Betonia

Table 6 below shows how the data of parcels is tabulated in the Oracle database

PARCEL_NO	BLOCK_NO	CommunityName	EST_YEAR	EST_AREA	EST_METER_PRICE	EST_PARCEL_VALUE
1	1	Beituniya	2010	1768	7	12376
7	1	Beituniya	2010	1135	7	7945
8	1	Beituniya	2010	998	7	6986
9	1	Beituniya	2010	669	6	4014
10	1	Beituniya	2010	654	6	3924
11	1	Beituniya	2010	642	6	3852
14	1	Beituniya	2010	776	6	4656
15	1	Beituniya	2010	730	6	4380
17	1	Beituniya	2010	2617	6	15702
19	1	Beituniya	2010	2435	7	17045
23	1	Beituniya	2010	705	6	4230
24	1	Beituniya	2010	790	6	4740
26	1	Beituniya	2010	1277	6	7662
30	1	Beituniya	2010	921	6	5526
31	1	Beituniya	2010	1010	6	6060
32	1	Beituniya	2010	885	6	5310
35	1	Beituniya	2010	2749	7	19243
36	1	Beituniya	2010	1183	6	7098

38	1	Beituniya	2010	568	6	3408
41	1	Beituniya	2015	2383	6	14298
43	1	Beituniya	2010	2000	7	14000
47	1	Beituniya	2010	790	6	4740
53	1	Beituniya	2010	562	6	3372
58	1	Beituniya	2010	976	6	5856
62	1	Beituniya	2015	938	6	5628
63	1	Beituniya	2015	1919	6	11514
65	1	Beituniya	2015	815	7	5705
66	1	Beituniya	2010	1000	6	6000
67	1	Beituniya	2010	3602	5	18010
68	1	Beituniya	2010	409	6	2454
71	1	Beituniya	2010	1000	6	6000
72	1	Beituniya	2013	8000	7	56000
78	1	Beituniya	2012	3661	6	21966
79	1	Beituniya	2010	816	6	4896
80	1	Beituniya	2013	1201	6	7206
81	1	Beituniya	2010	3947	6	23682
82	1	Beituniya	2010	1134	6	6804
83	1	Beituniya	2010	1231	6	7386
89	1	Beituniya	2015	1743	7	12201
96	1	Beituniya	2010	744	6	4464
98	1	Beituniya	2010	956	6	5736
99	1	Beituniya	2010	6000	6	36000
109	1	Beituniya	2010	1326	6	7956
115	1	Beituniya	2015	1014	6	6084
121	1	Beituniya	2013	707	7	4949
122	1	Beituniya	2013	707	7	4949

Table 5: Tabular data for parcels in block number 1 in Betonia

3.3 Example 3

Calculate the taxation value levied on building#0, parcel#13, block # 1 Betonia shown in Figure 6 according to the PTAX approach.

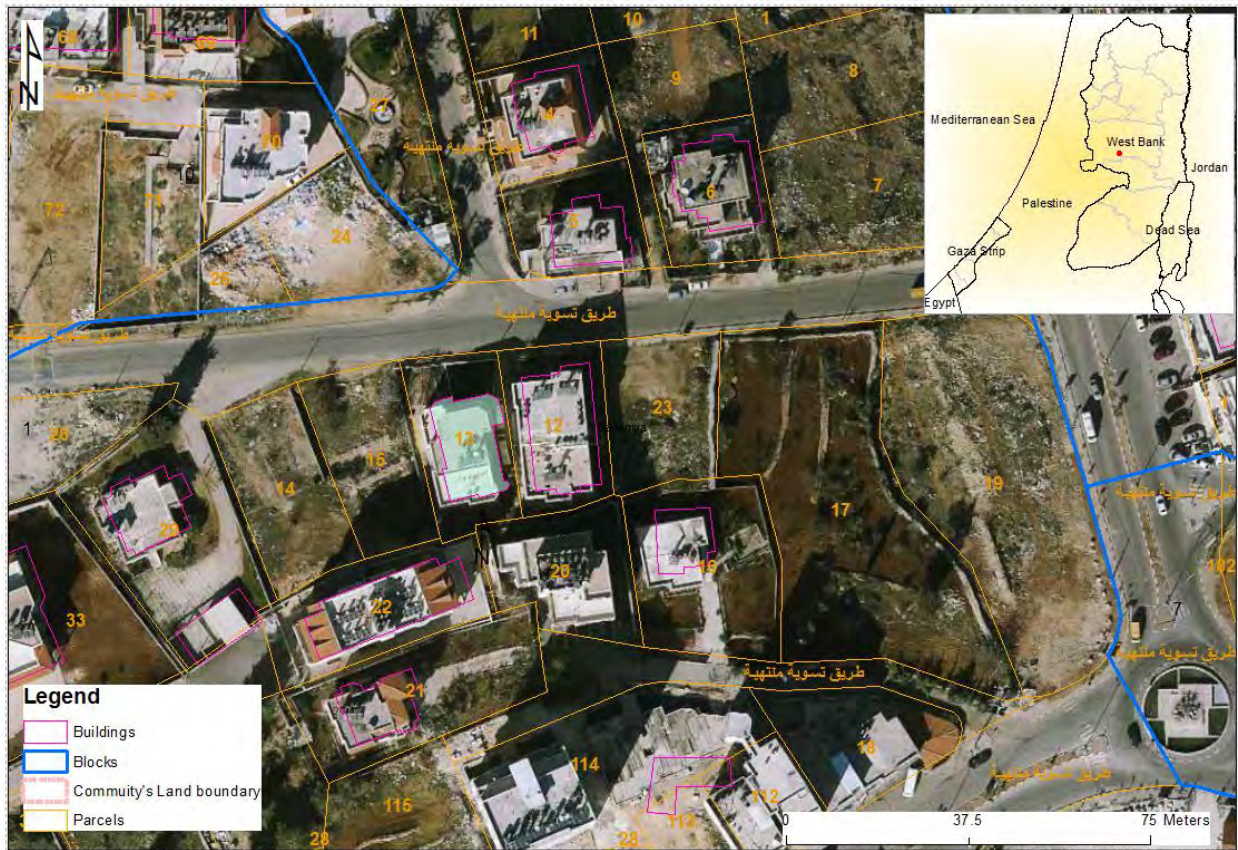


Figure 6: location of building #zero constructed in parcel number 13, block number 1 in Betonia

The building#0 has two floors

The ground floor has two units (each unit has unique ID)

The first floor has one unit

The rent value of unit with ID 75637 is **500** JD/year

The rent value of unit with ID 75638 is **500** JD/year

The rent value of unit with ID 75639 is **75** JD/year

The reduced rent value for the unit with ID 75637 = $80\% \times 500 = 400$ JD/year

The reduced rent value for the unit with ID 75638 = $80\% \times 500 = 400$ JD/year

The reduced rent value for the unit ID 75639 is $500 \text{ JD/year} = 80\% \times 75 = 60$ JD/year

الأظمة الرئيسية --> ضريبة الأملاك --> التخمين --> السجلات --> تخمين ضريبة الأملاك

معلومات من السجل

المكتب	6	دائرة ضريبة أملاك رام الله و البييرة
المدينة / القرية	60003	بيتونيا
المحلة	60015	تسوية بيتونيا
الحوض	1	المنطار ويتر الشماس
ملاحظات		

الحالي: 0
رقم القطعة: 13
رقم السابق: 25/2/4
المساحة: 682

سجلات التخمين: 0
الحالة: فعال
نوع التسجيل: 2
لمشاهدة إجمالي قيم التخمين للسنوات (CTRL+H)

تخمين الأرض | تخمين البناء | تخمين البناء الأخير

سنة التخمين	رقم البناء	الطابق	رقم الشقة	تسلسل الشقة	القيمة	التخمين	الحالة	المكلف هو المالك
2010	0	0	0	75637	500	400	فعال	تفاصيل
2010	0	0	0	75638	500	400	فعال	تفاصيل
2010	0	801	0	75639	75	60	فعال	تفاصيل
								تفاصيل

متسلسل المكلف	إسم المكلف	الحصة من الشقة	الحالة
79509	عطا جوده حسين جوده	1	فعال

ملاحظات: تخمين سنة 2010

Figure 7: The rent values in 2010 for units contained in building number zero constructed in parcel number 13, block number 1 in Betonia

The taxation value for the unit with ID 75637 = $17\% * 400 = 68$ JD/year

The taxation value for the unit with ID 75638 = $17\% * 400 = 68$ JD/year

The taxation value for the unit with ID 75639 = $17\% * 60 = 10.2$ JD/year

The Taxation value for the gross building = $68 + 68 + 10.2 = 146.2$ JD

المعلومات عن المكلف

المكتب 6 دائرة ضريبة أملاك رام الله و البيرة

المالك 79509 عطا جوده حسين جوده

المدينة 60003 بيتونيا

سجل الضريبة

الحوض الحي	القطعة	البنية	الشفرة	الطابق	السنة	قيمة التخمين	قيمة الضريبة	المبلغ المدفوع	الخصم	الغرامة	اشعار	الإضاء	الديون المتعلقة	المجموع مدفوع
1	13	0	0	0	2015	400	68	68	0	0	0	0	68	
0	13	0	0	0	2015	60	10.2	10.2	0	0	0	0	10.2	
0	13	0	0	0	2014	400	68	54.4	0	0	0	0	68	
0	13	0	0	0	2014	60	10.2	8.16	0	0	0	0	10.2	
0	13	0	0	0	2014	400	68	54.4	0	0	0	0	68	
0	13	0	0	0	2013	400	68	54.4	0	0	0	0	68	
0	13	0	0	0	2013	60	10.2	8.16	0	0	0	0	10.2	
0	13	0	0	0	2012	400	68	54.4	0	0	0	0	68	
0	13	0	0	0	2012	60	10.2	8.16	0	0	0	0	10.2	
0	13	0	0	0	2011	400	68	54.4	0	0	0	0	68	
0	13	0	0	0	2011	60	10.2	8.16	0	0	0	0	10.2	
0	13	0	0	0	2011	400	68	54.4	0	0	0	0	68	
0	13	0	0	0	2010	400	68	54.4	0	0	0	0	68	
المجموع 877.20														75637

تسلسل الشقة

ملاحظات **تحقيق سنة 2015**

1- إستعراض الإيضاحات. 2- المبالغ المطلوبة تفصيلي. 3- قائمة الوظائف الرئيسية. 4- المكلف و خصم المالكين.

Figure 8: The taxation values in 2010 for units contained in building number zero constructed in parcel number 13, block number 1 in Betonia

3.4 Example 4

Calculate the taxation value levied on building#0, parcel#13, block # 1 Betonia according to the JPVP approach.

Table 6 below shows how the data of units (flats) is tabulated in the database

FLT_SEQ	PARCEL	BLOCK	Community	BLD_NO	EST_YEAR	EST_FLAT_RENT	FLAT_NO	ROOM	EST_FLAT_RENT1	RENT_VALUE_USED
75582	2	1	Beituniya	0	2010	400	0	3		400
75583	2	1	Beituniya	0	2010	500	0	4		500
75584	2	1	Beituniya	0	2010	500	0	4		500
75589	3	1	Beituniya	0	2010	25000	0	2	25000	25000
75594	4	1	Beituniya	0	2010	2500	0	3		2500
75602	5	1	Beituniya	0	2010	750	0		750	750
75603	5	1	Beituniya	0	2010	550	0		550	550
75604	5	1	Beituniya	0	2010	250	0	3	250	250
75605	5	1	Beituniya	0	2010	375	0	4	375	375
75610	6	1	Beituniya	1	2010	375	0	4	375	375
75618	6	1	Beituniya	2	2010	100	0		100	100
75612	6	1	Beituniya	1	2010	375	0	4	375	375
75617	6	1	Beituniya	1	2010	250	0	2	250	250
75632	12	1	Beituniya	0	2013	375	0	4	375	375
75633	12	1	Beituniya	0	2013	375	0	4	375	375
75634	12	1	Beituniya	0	2013	375	0	4	375	375
75635	12	1	Beituniya	0	2013	375	0	4	375	375
75636	12	1	Beituniya	0	2013	375	0	4	375	375
75637	13	1	Beituniya	0	2010	500	0	5	500	500
75638	13	1	Beituniya	0	2010	500	0	5	500	500
75639	13	1	Beituniya	0	2010	75	0	2	75	75
75640	16	1	Beituniya	0	2010	200	0	2		200

75641	16	1	Beituniya	0	2010	400	0	4		400
156768	18	1	Beituniya	0	2014	16800	0		16800	16800
156769	18	1	Beituniya	0	2014	500	0	4		500
217221	18	1	Beituniya	0	2014	2000	0	4		2000
75654	20	1	Beituniya	1	2013	2250	0	4		2250
75655	20	1	Beituniya	1	2013	2250	0	4		2250
75666	20	1	Beituniya	2	2013	500	0	1		500
75656	20	1	Beituniya	1	2013	2250	0	4		2250
75657	20	1	Beituniya	1	2013	2250	0	4		2250
75658	20	1	Beituniya	1	2013	2250	0	4		2250
75659	20	1	Beituniya	1	2013	2250	0	4		2250
75660	20	1	Beituniya	1	2013	2250	0	4		2250
75661	20	1	Beituniya	1	2013	2250	0	4		2250
75662	20	1	Beituniya	1	2013	2700	0	4		2700
75663	20	1	Beituniya	1	2013	2250	0	4		2250
75664	20	1	Beituniya	1	2013	3500	0	4		3500
75665	20	1	Beituniya	1	2013	1000	0	4		1000
75667	21	1	Beituniya	0	2010	250	0	2	300	250
75668	21	1	Beituniya	0	2010	300	0	3	375	300
75669	21	1	Beituniya	0	2010	300	0	3	375	300
75670	21	1	Beituniya	0	2010	300	0	3	375	300
75671	21	1	Beituniya	0	2010	250	0	2	300	250
217193	22	1	Beituniya	1	2015	600	1			600
217194	22	1	Beituniya	1	2015	600	2			600
217195	22	1	Beituniya	1	2015	700	1			700

Table 6: Sample of tabular data for building units constructed in block #1 in Betonia.

التخمين لسنة

صفحة 0007 №

ملاحظات	قيمة الإيجار السنوي الصافي			الإيجار			اسم المستأجر أو وصف الاستعمال	محتويات البناء									
	استئناف	اعتراض	تخمين	السنوي المصدر	الشهري			تسليط	طابق	غرفة	تيوان	مطبخ	حمام ومرحاض	مرحاض	تكان	مخزن	مخارج
					دينار	فلس											
							٢٠١٩										
			٥٤٠		٦٥٠												دور ٢
			٥٤٠		٦٥٠												دور ٢
			٥٤٠		٦٥٠												دور ٢

Figure 10: The content of hard copy records regarding the net rent values of units for particular building.

4 How the S and R values are determined?

Apparently, the critical challenge in the valuation process is to estimate the sale value (S) for land and rent value (R) for a unit in a building. Traditionally, the sale value is assessed by three methods: comparison method, cost method, and income method. In all these three methods, valuer's experience still plays a major component in estimating the sale value for a certain land. However, in the local context of Palestine, the sale value can be obtained from sources such as:

1. Palestine Capital Market Authority (PCMA)
2. Palestine Land Authority (PLA)
3. Real Estate Agencies (Private Sector)

With respect to the rent value (R), it can be obtained from contract that is agreed by both renter and rentee and thus the actual rent value can be directly entered in the database.

In this regards, huge efforts have been put into developing models in order to come up with the best estimation for the S and R values to achieve the maximum degree of fairness. At present, the approaches below can be considered as good source for S and R values:

1. The PTAX database
2. The JPVP approach
3. The Valuation Base Committee (BC)
4. The VNG approach
5. The GIS approach
6. Standard value method

For example, parcel # 122 in block number 1 in Betonia has a sale value of 7 JD/m² according the PTAX database while its actual sale value reaches 350 JD/m² according base committee. In the same manner, the average rent value for building # zero contained in parcel # 73, block # 1 in Betonia is 2 JD/m² while its actual rent value might reach 20 JD/m² according base committee.



Figure 11: Comparison between sale and rent values according PTAX data and base committee.

5 Enhancing the S and R values available in the PTAX

It is acknowledged that the S and R values stored in the PTAX don't reflect the actual values due to the fact that valuers tend to reduce these values themselves (or by internal regulation at the level of GDPT) in order to take into account the local economy in Palestine and the financial resources of taxpayers. However, in all cases, it is recommended to include the actual sale/rent value in the PTAX instead of the discounted ones. For this reason, a factor (C) can be integrated in the PTAX formula to represent the percentage of the discount. Therefore, the PTAX taxation equations can be re-written as below:

For Parcels:

$$T_p = 10\% * 6\% * B * S * A \quad (8)$$

For Buildings

$$T_u = 17\% * 80\% * B * E * R \quad (9)$$

Where B is a discount factor that is multiplied by the actual sale/rent value to take care of local economy in Palestine and the financial resources of taxpayers.

For example, if it is agreed to consider the discount factor to be 1% then in case the actual sale value of a particular parcel is 700 JD/m² then multiplying it with 1% will generate a sale value of 7 JD/m².

6 The effect of “zone use” and “unit use” in estimating S and R values

Generally, there is a good match between the unit (building) use and zone use that is assigned in the urban master plan shown in Figure 12. In general, the fields below need to be integrated into the PTAX database in order to be able to determine K value according to the JPVP approach.

- Unit Area (m²)
- Unit Height (m)
- Unit Use
- Zone Use
- Location Class (to be derived later from proximity to facilities, road characteristics, neighborhood attribute, Noise condition, etc.)
- Construction Date
- Construction Material
- Construction Condition
- Availability of Elevator

- Availability of Parking
- Availability of Utilities (Electricity, Water, Telephone, etc.)

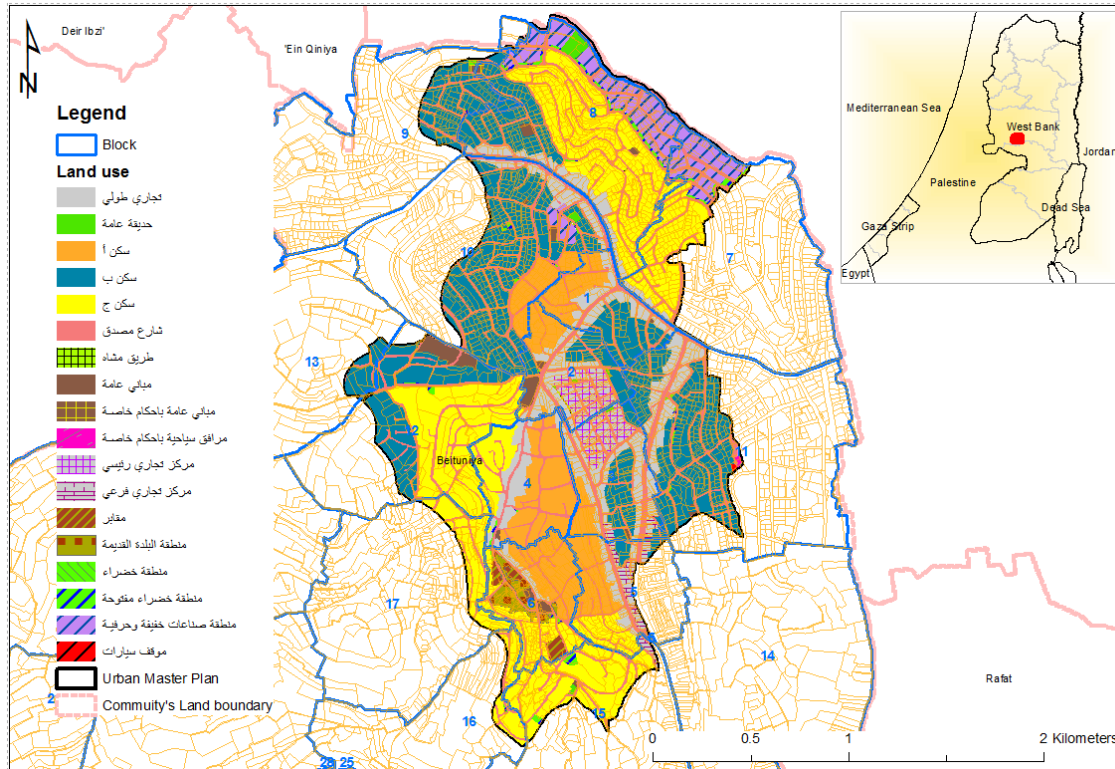


Figure 12: Urban master plan of Betonia

However, PTAX database must be enhanced to in terms of start entering values in the “unit use” field shown in the screenshot below

الأظمة الرئيسية -- خريطة الاملاك -- التخمين -- السجلات -- تخمين ضريبة الاملاك

معلومات من السجل

المكتب	6	دائرة ضريبة أملاك رام الله و البيرة	الحاي	0
المدينة / القرية	60013	عطارة	رقم القطعة	188
المحلة	60013	عطارة	الرقم السابق	0
الحوض	3	الهبش	المساحة	
ملاحظات				

سجلات التخمين: سجلات التخمين (0) الحالة: 188 نوع التسجيل: 2 ملاحظة إحصائية إجمالية قيم التخمين للسنوات (CTRL+H)

تخمين الأرض | تخمين البناء | تفاصيل البناء | تخمين البناء الأخير

السنة	البنية	الطابق	الشقة	تسلسل الشقة	حرفة	ليوات	مطبخ	حمام	مرحاض	فرن	كراج	مغزرت	دكان	أخرى	مدور مؤجر
2012	1	0	0	133763	3	1	1	1							الايجار
2012	1	0	0	133764	3	1	1	1							الايجار
															الايجار
															الايجار

اسم المالك: المنطقة A A

وصف الإستعمال: صنف البناء

ملاحظات: نوع البناء

الدرجة و المستوى: تفاصيل

مساحة البناء: سعر المتر

رجوع

Figure 13:

7 JPVP values for S and R: are they per block or at a point?

According to the JPVP approach, S and R values will be derived from the PTAX by multiplying them by K and M coefficients. K accounts for property characteristics (location, condition, quality, style, utilities, etc.) where M considers municipality class.

There is an idea to represent S and R values as points within blocks such that values for S and R at other locations can be obtained by interpolation. In this regard, three challenges arise:

1. Where to locate these points (point distribution) within the same block?
2. How many points should be taken (number of points)
3. The radius of interpolation (number of points\minimum distance that will participate in the interpolation)

Figure 5 shows the land use within block one in Betonia according to the urban master plan approved in 2008.

8 Valuation base committee work

The result of the work of the base committee is represented in assigning S and R value for each block according to the land use (residential, commercial, industrial and tourism). In this case, The S and R values corresponds to the actual sale and rent values in the reality and are not derived based on the PTAX database. The map below shows the proposed sale\rent values for a number of blocks in Betonia.

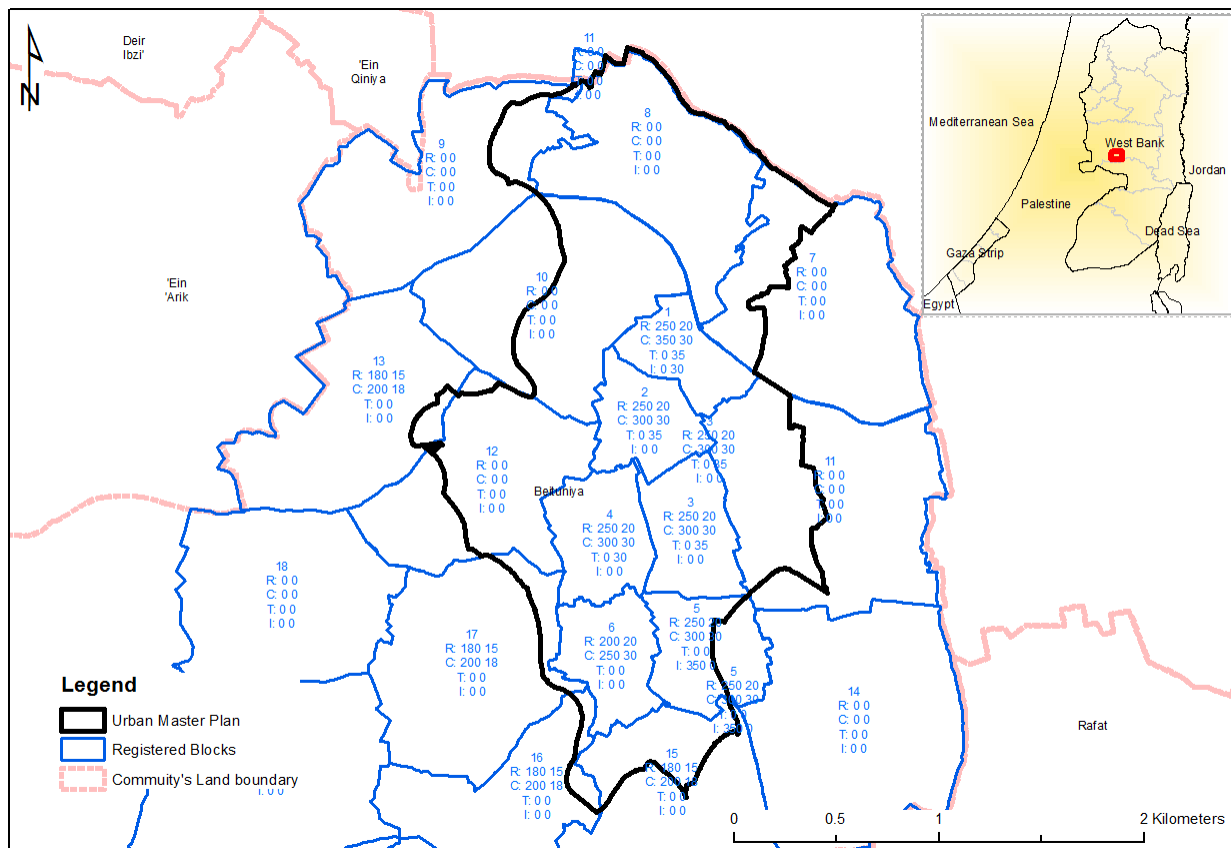


Figure 14:

9 GIS, Statistical/Artificial approach to derive S and R values,

On the whole, the issue when specifying S and R values is how to justify and defend them. Due to the fact that S and R values available in PTAX are not defensible, other approaches are suggested to overcome this challenge. For this purpose, it is aimed at applying the GIS to create valuation raster for land value such that classes are interpreted to sale values (JD/m²) and thus the S value at each location is obtained. Furthermore, the valuation raster can be fed into MRA or ANN as a variable (location class variable) in order to estimate the R value of all units of buildings. This approach is being tested and performed at the moment.

Mathematically, valuation raster can be derived based on the equation below

$$Land\ Value = \sum_{i=1}^n W_i F_i \quad (10)$$

Where n number of variable considered, W_i is the weight of the i^{th} factor, F_i is the i^{th} factor. Numerically, the valuation can have any value from 1 to 100 and then classified into five groups. next, the classes are labelled with their sale values according to the valuer's experience. Having the sale value at the level of pixel paves the way to assign these values to parcels and thus mass valuation for all parcels can be implemented.

As the valuation raster provides information regarding lands of high/low values depending on set of variables, this raster itself can be considered as a single variable that can be fed into the MRA equation to apply the mass valuation for buildings.

$$V_u = C_1V_1 + C_2V_2 + \dots + C_nV_n \quad (11)$$

Where V_u is the estimated value for the u^{th} unit, C_1 is a coefficient multiplied by the 1st variable, V_1 is the 1st variable, C_2 is a coefficient multiplied by the 2nd variable, V_2 is the second variable, C_n is the n^{th} coefficient multiplied by the n^{th} variable, V_n is the n^{th} variable.

It remains to precisely identify the variables based on which parcels and buildings are valued.

10 What is the difference between the GIS and JPVP approaches?

Despite the fact that the GIS (with MAR or ANN) and JPVP approaches are planned to apply the same set of variables, they can be distinguished by highlighting that the JPVP approach is considered a single property valuation technique while the GIS can achieve mass valuation. The JPVP approach requires collecting data for each single parcel/building in order to be able to determine the K coefficient. Having the massive data size for properties in mind, this sounds to be not practical and thus why revaluation in five years (in accordance with laws) fails to be approached.

In return, in case the GIS approach is implemented, a massive spatial analysis is applied that ends up by assigning sale/rent values.

11 The VNG approach

This approach introduces methods to predict sale values for lands and buildings. In case of land, this approach depends on identifying boundaries for areas within a particular local authority that have same characteristics in terms of social and economic factors, buildings style, services, and people income. Having the boundaries identified, valuation experts can assign sale value for these areas based on experience, knowledge and transactions available. These areas are called value areas. However, the boundaries of value areas are recommended to be demarcated in coincidence with cadaster blocks, where possible.

For buildings, the sale value is determined by the cost method. According to this approach, a gallery photo is developed to indicate the cost of a wide range of buildings types in JD/m²

Mathematically, the taxation for vacant land can be written as:

$$T_p = 10\% * S_p * A_p \quad (12)$$

Where T is the taxation value for a parcel (P) in JD, 10% the taxation percent, S_p is the sale value in JD/m² assigned to zone that contains the land, A_p is the geometric area of land

Taxation for land with building constructed on it can be written as:

$$T_u = 10\% * \left(\frac{f}{5} * \frac{A_u}{A_B} * S_p * A_p * + \frac{Z_i}{Z} * S_u * A_u \right) \quad (13)$$

Where T_u is the taxation value for a parcel (P) in JD and unit (u), 10% the taxation percent, f is the number of floors of the building constructed on the land (f is considered to be 5 in case the number of floors is less than or equal 5, this includes the case when no buildings is constructed on the land), S_p is the sale value in JD/m² assigned to zone that contains the land, A_p is the geometric area of land, Z_i the sale value of the i^{th} zone in JD/m², Z is the average sale value of all zones

($k=k_1+k_2+k_3+\dots+k_n/n$), S_u is the cost of unit area in a building (this is obtained by comparison between the building in question and photo gallery table), A_u is the area of the unit and A_B is the total area of the building

However, in case the geometric area of the unit (flat) is not given, the formula below can be implemented

$$T_u = 10\% * \left(\frac{f}{5} * \frac{S_p * A_p}{n} * + \frac{Z_i}{Z} * S_u * A_u \right) \quad (14)$$

Where T_u is the taxation value for a parcel (P) in JD and unit (u), 10% the taxation percent, f is the number of floors of the building constructed on the land (n is considered to be 5 in case the number of floors is less than or equal 5, this includes the case when no buildings is constructed on the land), S_p is the sale value in JD/m² assigned to zone that contains the land, A_p is the geometric area of land, n is the number of units, Z_i the sale value of the i^{th} zone in JD/m², Z is the average sale value of all zones ($k=k_1+k_2+k_3+\dots+k_n/n$), S_u is the cost of unit area in a building (this is obtained by comparison between the building in question and photo gallery table),

Example:

Calculate the taxation value for a flat of **150 m²** that is located in the fourth floor with a construction cost of **\$650/m²** knowing that the geometric area of the land is **900m²**, the land sale price is **\$950/m²**, and average land sale price is **850**?

$$T_u = 10\% ((950 * 150 / 900) + 650 / 850 * 650 * 150)$$

$$= 10\%((950 * 0.15) + (0.76 * 97500)) = 10\%(142 + 74,100) = ???$$

What is interesting here is that the taxation percent can be derived from the amount of money the government needs in each particular year divided by the total amount of valuation of buildings and lands. Mathematically, the taxation percent can be written as follows:

$$P_u = \frac{V_g}{V_p} \quad (15)$$

Where P_u is the taxation percent, V_g , the amount of money the government needs in a particular year and V_p the total amount of property valuation for buildings and lands.

12 Standard value method

A committee a combination of GDPT and private sector that has members different from those official valuers is entitled to assign the market value\rent value in JD/m² at particular points such that these points as considered as reference (base) to apply the equations below:

For Land:

$$T_u = 6\% * 10\% * K * S * A \quad (16)$$

Where K is the coefficient value that differentiate between a parcel and another, S is the market value of land at particular location that will be set by GDPT and private sector and applied by valuers to appraise other parcels in the same area

For buildings

$$T_u = 17\% * 80\% * K * R * A \quad (17)$$

Where K is the coefficient value that differentiate between a unit (flat) and another, R is the rent value of a unit (flat) at particular building that will be set by GDPT and private sector and applied by valuers to appraise other units (flat) in the same area

13 At which stage parcels become non-taxed?

Any parcel of area less than 1700 m² and contains a building is exempted from property tax. In this case, the tax is transferred to the building. The map below shows which parcels are taxed and not taxed in block number 1 in Betonia.

MINUTES OF MEETING
 BETWEEN
 THE JICA MONITORING MISSION TEAM
 AND
 THE MINISTRY OF FINANCE OF PALESTINE
 ON
 THE PROJECT FOR IMPROVEMENT OF LOCAL FINANCE SYSTEM IN
 PALESTINE

The JICA Monitoring Mission Team (hereinafter referred to as “the Team”), organized by the Japan International Cooperation Agency (hereinafter referred to as “JICA”) headed by Mr. Haruyuki SHIMADA, visited Palestine from 6th to 10th of December 2015 and had a series of discussion and exchanged opinions with General Directorate of Property Tax (hereinafter referred to as “GDPT”) on matters concerning the Project for Improvement of Local Finance System in Palestine (hereinafter referred to as “the Project”).

The results of the discussions are recorded as a Minutes of Meetings (M/M) and signed by GDPT and the Team as attached.

Ramallah,
 10 December 2015



Mr. Haruyuki SHIMADA
 Acting Director,
 Public Governance and Financial
 Management Team, Governance Group,
 Industrial Development and Public Policy Dep.
 JICA



Mr. Mahmoud NOFAL
 Director General of the Property Tax
 General Directorate of the Property Tax
 Ministry of Finance
 Palestinian Authority

**Minutes of Meetings of Discussions
between GDPT and the JICA Monitoring Mission Team**

【Items Agreed】

1. The purpose of the mission

The Team visited and made discussions with GDPT of Palestinian Authority to clarify the outcomes of the Project so far and the tasks needed to be done during the remaining project period (up to end of September 2016)¹. The results of discussions are recorded as a Minutes of Meetings (M/M) and signed by GDPT and The Team. As a result of discussions, both GDPT and the Team also agreed to make every effort to conduct the project activities in accordance with attached monitoring sheet with a view to end the Project as scheduled at the end of September 2016.

2. Employment of additional local engineers

The Team expressed that GDPT's request of employing additional local engineers is unacceptable because they are non-permanent (contract-basis) staff. As defined in the Record of Discussions(R/D) of the Project, the concept of JICA's technical cooperation is to transfer skills and knowledge to counterpart personnel who are expected to remain in their positions so that they continue to conduct their duties even after the termination of the Project. The Team determines that the requested personnel are not considered as appropriate for technical transfer.

As a result of discussion, both GDPT and JICA agreed that GDPT will hire engineers from a municipality or Palestinian Authority.

3. Training

The Team accepted to conduct a training program in Japan in late May 2016 and strongly requested GDPT to select qualified and appropriate staff for participation to the program. It would be the last of the second and third country trainings. In addition, the both sides agreed that the training in Palestine shall be also taken place during the period from April to July in 2016.

4. Public Awareness Campaign (PAC)

¹ The project will be completed at the end of September 2016. But activities by Japanese experts in Palestine will be finished by the beginning of September 2016.

The both sides agreed to provide necessary budget for conducting PAC with the same contents that JICA supported last year, and an SMS service for PAC will be conducted by GDPT by itself.

5. TDMMU

The Team acknowledged and reconfirmed in accordance with the R/D that GDPT is solely responsible for organizing and restructuring TDMMU. In this respect, the project will continue monitoring Master Plan Matrix if necessary.

6. Employment of a staff of Ministry of Local Governance (MOLG)

The Team requested GDPT to provide JICA with the evidence materials that justify the payment of an “incentive” to a governmental officer (in this case, an officer from MoLG) for an off duty job. Without the evidence, JICA’s regulation does not allow such payment. The Team agreed to pay for an incentive only and after such evidence is presented. Nevertheless, the Team is of the view that the pilot project for GIS should be completed even without further involvement of a MoLG officer.

As a result of discussion, GDPT pledged to obtain the requested evidence from Ministry of Finance and MOLG.

7. New Valuation Standard (VS)

JICA has conducted the technical cooperation project for supporting designing new valuation standard and its application to Palestine. Both sides re-confirmed that the Project is conducted in line with the agreed valuation standard. The formula has been adopted (9th and 20th September 2015 as attached) and refinement processes are as follows; simplification of value influence factors, verification of market ratio (multiplier) and verification of standard point value.

In the discussion, GDPT insisted the Project Team has not achieved anything (VS Formula, Manual etc.), though GDPT confirmed that the draft VS formula was officially adopted in principle. The Team explained that VS Formula draft was approved on September 9th and 20th 2015, and VS Formula as well as the manual is in process for completion.

8. Assignment of valuation standard experts

The Team stated that JICA has made its best efforts to attain the project purpose and upon request from GDPT, has allocated available resources including Dr. Ayoub from Jordan and GIS pilot project. In addition, the Team mentioned that if GDPT wishes to

request further input from JICA, GDPT has to submit TOR immediately which was requested by JICA Palestine Office on 16th of November 2015. However, JICA thinks that the current staffing is sufficient for implementing the rest of the project activities. Furthermore, JICA is not able to input the third country experts in terms of allocated budget and time.

In the discussion, GDPT requested Japanese experts to stay longer period for the project. However, in terms of contract, JICA explained Japanese experts cannot be stationed in Palestine longer than planned period.



【Items Not Agreed】

1. PDA

The Team explained that JICA cannot provide PDA due to budget constraints. In the discussion, GDPT insisted to introduce PDA and related systems. JICA, however, repeatedly responded that JICA cannot approve the request due to the budget constraints and lack of time.



Other Points Discussed

- Workshop
GDPT requested JICA to provide necessary fund to take place two to three days retreat or workshop. Although JICA is supportive to hold such events by GDPT, JICA cannot give financial assistance.
- Equipment
The Team mentioned the results of JICA's appraisal on additionally-requested equipment which is either approved or not-approved. The table below shows the JICA's appraisal results.

Equipment	Status
PDA	Not approved by JICA
GPS	Not approved by JICA
Laser	Deducting the number from 5 to 2
Digital Camera	Not approved by JICA
Monitors-5	Procurement in process
Workstations-5	Procurement in process
Laptops-2	Procurement in process
Computers for evaluators	Not approved by JICA

- VNG
VNG will be assigned as a second-opinion adviser to GDPT.

END



Attachments

Attachment 1	Property Valuation Standards in Palestine (Draft Final Version)
Attachment 2	Technical Manual: Explanation on Property Valuation Standards in Palestine (Draft Final Version)
Attachment 3	Handbook for Valuators – Field Guide to Property Valuation Standards in Palestine
Attachment 4	Trainer’s Guide: Valuation Standards Technical Training
Attachment 5	Training in Property Valuation Standards: Completion Report
Attachment 6	Advisory Note for GDPT towards Revaluation Strategy Planning Based on the New Valuation Standards in Palestine
Attachment 7	Minutes of Meeting between JICA Terminal Evaluation Team and MoF for the Project (May 2016)

MINISTRY OF FINANCE
GENERAL DIRECTORATE OF PROPERTY TAX

Property
Valuation Standards in
Palestine

(Draft Final Version)

March 2016
J-PVP

Property Valuation Standards in Palestine

(Draft Final Version)

March 2016

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I. General Provisions

I-1 Purpose of the Valuation Standards

Property tax is one of the essential sources of revenue for government, especially local government. It is imposed on land or building owners according to the appraised value, which is determined by the combination of factors such as location, size and conditions. The Property Tax Valuation Standards in Palestine (herein after referred to as the “Valuation Standards”) provides the basis for appraising the value of a property.

The Valuation Standards is required to ensure three principles of valuation: namely a) fairness, b) simplicity and c) neutrality. It also needs to be modified periodically so as to reflect change of social and economic status in Palestine.

I-2 Administration and Management of the Valuation Standards

It is essential that the Valuation Standards is properly administered and managed by the General Directorate of Property Tax (GDPT). The GDPT is responsible for developing, modifying and disclosing the Valuation Standards.

GDPT is authorized and mandated to conduct the following activities in accordance with valuation procedures stipulated in this Valuation Standards.

II. Key Principles of Valuation

II-1 Target of Valuation

Both land and building, that compose property, are subject to appraisal of value under this Valuation Standards.

In appraising the value, this Valuation Standards designates parcel as the basic unit of valuation for land and flat basic unit of valuation for building.

II-2 Base Date of Valuation

A certain date is set as the base date of valuation for all properties in Palestine.

II-3 Bases of property valuation

Base of valuation for land is market value, while base of valuation for building is rental value.

II-4 Key Modalities of Valuation

This Valuation Standards adopts Area-based Approach as the basic methodology for property valuation. In the efforts to secure its fairness, simplicity and neutrality, methods commonly used through Sales Comparison Approach are also incorporated into this Valuation Standards.

II-4-A Categorizing municipalities and calculating Standard Land Reference Values

Identify the category of each target municipality. Calculate the reference standard values from the entire land properties of a municipality (Standard Land Reference Values). The Standard Land Reference Values are set for (i) understanding the level of a quarter/block's standard value in the municipality; and (ii) also grasping the level of the municipality among municipalities in terms of land value.

II-4-B Calculating standard value of quarter/block by usage category

Calculate the standard value of target quarter/block for each of the following four (4) usage categories.

- 1) Residential area
- 2) Commercial area
- 3) Industrial area
- 4) Tourism area

Standard value is a value virtually set for each of the four (4) usage categories per quarter/block. It is the value of a property (either land or building) when all attributes of it is considered to be standard. In appraising the value of each property, the standard value of its quarter/block is what the final appraised value will be based on.

Standard value for land is derived from land market value, and standard value for building is derived from flat rental value.

The usage of land property is determined based on the usage category designated in the Physical Master Plan as of the base date of valuation, while the usage category of building is determined based on field inspection.

II-4-C Applying Value Adjustment Matrix based upon property's value influence factors

Value Adjustment Matrix, which is a tabulated set of data indicating adjustment weight per each valuation influence factor in accordance with the category of municipality as well as usage category of property, is prepared based on degree of differences between the standard value of a quarter/block and the value of individual property within the same quarter/block. Adjustment weights on value influence factors are used as the tool to appraise the value of individual property in comparison with standard value.

III. Procedures of Valuation

III-1 Identifying Municipality Category

Identify and confirm the category of municipality which the target property belongs to. The category of municipality shall be based upon the categorization set by the GDPT.

III-2 Calculating Standard Land Market Value

Standard Land Market Value is determined through the following procedure.

III-2-A Preparing data

Obtain and prepare the following data.

- 1) Quarter/Block Map (from GDPT or municipality)
- 2) Ledger book data
 - (a) Estimated year
 - (b) Block number
 - (c) Quarter number
 - (d) Parcel number
 - (e) Area size
 - (f) Rental value per square meter
 - (g) Rental value of parcel
- 3) Land usage category (reclassify the usages on Physical Master Plan into four [4] usage categories)

Ensure the quarter/block information is updated on block maps and Physical Master Plan.

Request the municipality that has jurisdiction for preparing the block maps, if necessary.

III-2-B Calculating average land rental value by usage category

Filter the data set above to the latest estimated year of parcel. Classify it into either one of the four (4) usage categories. Excluding outliers, calculate the average (f) the rental value per square meter.

III-2-C Determining Standard Land Rental Value of quarter/block by usage category

Refer to the Land Reference Standard Values as needed in order to assess the relevance of

the average value obtained in III-2-B, and determine the Standard Land Rental Value of quarter/block by usage category. (A)

Standard Land Rental Value = (A)

III-2-D Calculating Standard Land Market Value of quarter/block by usage category

Multiply the Standard Land Rental Value (A) with the market ratio in order to determine the Standard Land Market Value of quarter/block by usage category (B). This particular task is performed only once at the first time when this Valuation Standards is applied.

Standard Land Market Value = (B)

III-3 Calculating Standard Building Rental Value

Standard Building Rental Value is determined through the following procedures.

III-3-A Preparing data

Obtain and prepare the following data.

- 1) Quarter/ Block Map (from GDPT or municipalities)
- 2) Data from ledger book
 - (a) Estimated year
 - (b) Block number
 - (c) Quarter number
 - (d) Parcel number
 - (e) Building number
 - (f) Floor number
 - (g) Flat number
 - (h) Rental value per square meter
 - (i) Flat sequence number
- 3) Obtain the following data from the field survey.
 - (j) Flat usage classification
- 4) Obtain the following data from building permit and field survey etc.
 - (k) Floor area size
 - (l) Flat area size
 - (m) Flat count per floor

III-3-B Calculating the average building rental value of quarter/block by usage category

Filter the dataset above to the latest estimated year per flat. Divide it into four (4) groups according to the actual usage category (Residential, Commercial, Industrial and Tourism). After excluding the outliers, calculate the average of (h) rental value per square meter.

III-3-C Determining Standard Building Rental Value of quarter/block by usage category

Verify, as needed, the average value obtained in III-3-B by referring to the statistical data, and determine the Standard Building Rental Value of quarter/block by usage category. (C)

III-4 Identifying the Location of Target Properties in Quarter/Block

Identify the location of the target property on the block map.

III-5 Valuation of Land

III-5-A Identifying parcel number

Identify the parcel number of the target land using block maps, Physical Master Plan and other existing sources.

III-5-B Identifying parcel area size

Identify the parcel area size by referring to existing data.

Parcel Area size (m²) (D)

III-5-C Identifying the usage category of land

Identify the usage category of land from either one of Residential, Commercial, Industrial or Tourism.

III-5-D Collecting required data referring to the value influence factors

Conduct survey to collect required data referring to the value influence factors.

III-5-E Applying Value Adjustment Matrix

Based on the result of survey, determine the adjustment weight of each value influence factor by referring to the relevant Value Adjustment Matrix. Multiply all the adjustment weights to compute the Net Adjustment Weight.

Net Adjustment Weight (E)

III-5-F Calculating parcel market value

Multiply the Standard Land Market Value (B) with the parcel area size (D) and with the Net Adjustment Weight (E) to obtain the parcel market value (F).

$$(B)*(D)*(E) = \text{Parcel Market Value (F)}$$

III-6 Valuation of Building

III-6-A Identifying building number

Identify the building number according to existing data on ledger book. If no data exists, allocate a number to each building within a parcel. When more than one building stands on a parcel, number them in order of the year of completion.

III-6-B Identifying flat number

Identify the flat number according to existing data on ledger book. If no data exists, allocate certain numbers.

III-6-C Identifying flat area size

Identify the area size of the flat using the existing documents or obtaining from field visit.

$$\text{Flat area size} = (G)$$

III-6-D Identifying usage category of flat

Identify the usage category of the flat according to the actual use.

III-6-E Collecting required data referring to the value influence factors

Conduct survey to collect required data referring to the value influence factors

III-6-F Applying Value Adjustment Matrix

Based on the result of survey in III-6-E, determine the adjustment weight of each value influence factor by referring to the relevant Value Adjustment Matrix. Multiply all the adjustment weight to compute the Net Adjustment Weight (H).

$$\text{Net Adjustment Weight} = (H)$$

III-6-G Calculating Flat Rental Value

Multiply the Standard Building Rental Value (C) with flat area size (G) and with the Net Adjustment Weight (H) to obtain the Flat Rental Value (I).

$$(C)*(G)*(H) = \text{Flat Rental Value (I)}$$

MINISTRY OF FINANCE
GENERAL DIRECTORATE OF PROPERTY TAX

Technical Manual

Explanation on Property Valuation Standards in
Palestine

(Draft Final Version)

March 2016

J-PVP

Technical Manual
Explanation on Property Valuation Standards in Palestine
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Annex 2: Valuation Approaches

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Annex 5: How to obtain flat area size

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Annex 7: Value Adjustment Matrix

Annex 8: How to appraise Standard Rental Value of Target Quarter/Block

I GENERAL PROVISIONS

I-1 Purpose of the Valuation Standards

Property tax is one of the essential sources of revenue for government, especially local government. It is imposed on land or building owners according to the appraised value, which is determined by the combination of factors such as location, size and conditions. The Property Tax Valuation Standards in Palestine (herein after referred to as the “Valuation Standards”) provides the basis for appraising the value of a property.

The Valuation Standards is required to ensure three principles of valuation: namely a) fairness, b) simplicity and c) neutrality. It also needs to be modified periodically so as to reflect change of social and economic status in Palestine.

<EXPLANATION>

In any property tax system, valuation of a property should be conducted in a fair and equitable manner. The mechanism of valuation should be simple so that taxpayers can understand it, collectors can easily administer it, and lawmakers can be held accountable for it. It should also serve the purpose of tax neutrality – producing as little economic distortion as possible.

Valuation standards are a means that will help a tax system to attain three goals, which are:

- a) Fairness
- b) Simplicity
- c) Neutrality

One needs to consider five elements that are closely related to these three goals.

Accountability

As of 2016, the process and method of property tax valuation have not been fully open to the public in Palestine. The 1954 Jordanian Property Tax Law¹ stipulates only the basic framework of the valuation matters. However, because the property tax is not a kind of tax based on taxpayers’ self-assessment – a taxpayer is not expected to declare the value of his/her property

¹ Law No. (11) of 1954, The Law Concerning the Tax of Buildings and Land within the Areas of Municipalities and Amendments

by himself/herself – and because the property upon which the tax is being levied is visible it has become necessary for the government, whether national or local, to be accountable to the taxpayers. In this regard, accountability is most closely related to the first purpose of formulating the property tax valuation standards, fairness.

It has, furthermore, become important to allow the public to know the nature of the property tax valuation so that they can review and challenge the validity of the valuation and also question the spending of the income generated by the property tax. By allowing taxpayers to access the information pertaining to the process of the property tax valuation, people can more easily understand the relation between the property tax he/she pays and the property upon which the tax is being levied. Moreover, by facilitating the taxpayers' understanding of the property tax, both the collection rate and the collection amount are expected to increase in the long run. Hence, the need for property tax valuation standards which are simple and easy for taxpayers to understand is fulfilled.

Even under the existing 1954 Jordanian Property Tax Law a taxpayer can either challenge or make an appeal to the amount of property tax he/she has to pay. It is true that the likelihood of challenge or appeal against the amount of property tax one has to pay will increase after the implementation of this Valuation Standards. Nevertheless, by allowing taxpayers to scrutinize the process it is expected that the GDPT will be able to gain the trust of the Palestinian taxpayers.

Reproducibility

Valuations conducted in the procedures described in this Valuation Standards will enable GDPT valuers to reach the same value conclusion no matter how many times the valuations have been conducted for a property, provided the valuations are based on the same set of data and information. This is called reproducibility. This happens because the valuation standards require the valuator to conduct his/her valuation in a coherent and impartial way, in other words the valuation is to be conducted in a non-arbitrary manner. In this regard, reproducibility is related to the first and third purposes of formulating the property tax valuation standards, fairness and neutrality.

In summary, the valuation standards can guarantee that valuation is conducted in a non-whimsical style, precluding valuers' arbitrariness and the difference of value opinions that

might arise among different valuers.

Sustainability

Property tax, unlike one-time taxes and fees such as transfer/transaction fees, is a recurring tax based on land and/or improvements and is paid by owners of properties. The tax requires valuation to be conducted on a regular basis. This means that a valuation conducted in a certain year is inextricably linked with the one conducted in the past and future.

Maintaining Balanced Valuation

It is a well-established custom around the world to use the method of ‘mass appraisal’² for the purpose of collecting property tax. Here, the utmost importance is given to the fact that properties are valued impartially: properties having similar features and located in the same area – in close distance to each other – are expected to experience similar assessment. In this regard, maintaining balanced valuation is most closely related to the first purpose of formulating the property tax valuation standards, fairness.

Efficiency

This Valuation Standards adopts ‘mass approach’ as the basic methodology of valuation. In order to make the mass approach operational, efficiency of valuation procedures is essentially required. In Palestine, no standards for valuation has been formulated, resulting in situations where valuers oftentimes faced challenging tasks to appraise the value of individual property due to lack of uniformity in valuation and needed more extra time to make their own value-judgments. Even such appraisal has caused arbitrariness in valuation. The application of this Valuation Standards is expected to reduce such inefficiency of valuation procedures and arbitrariness. Yet, it should be noted that this Valuation Standards is not aimed to reduce the amount of workload in the short span of time. Rather, the aim is to optimize the way in which the valuation works are conducted in the long run, although volumes of works for valuation is anticipated to be increased during the early stage of the application of this Valuation Standards. More importantly, the use of this Valuation Standards will enable valuers to conduct valuation in a logical way and reduce arbitrariness in appraisal. Furthermore, even people who are not valuers also can verify the result of the valuation objectively. In this context, efficiency is

² Mass appraisal is defined as the use of standardized procedures for collecting data and appraising property to ensure that all properties within a municipality are valued uniformly and equitably. It is the process of valuing a group of properties as of a given date, using common data, employing standardized methods and conducting statistical tests to ensure uniformity and equity in the valuations.

most closely related to the second purpose of formulating the property tax valuation standards, simplicity.

I-2 Administration and Management of the Valuation Standards

It is essential that the Valuation Standards is properly administered and managed by the General Directorate of Property Tax (GDPT). The GDPT is responsible for developing, modifying and disclosing the Valuation Standards.

GDPT is authorized and mandated to conduct the following activities in accordance with valuation procedures stipulated in this Valuation Standards.

<EXPLANATION>

In valuation, it is required to appraise a large number of properties within a limited time frame, hence following points should be highlighted.

1) Organizational Arrangement

It is important to assign the right people at the right position to ensure efficient valuation works. Moreover, in order to prevent arbitrary judgment by individual valuers, decision making should be done collectively.

2) Information Collection

As parcel/flat area size and their transaction records are fundamental data to conduct valuation, they are needed to be collected in an orderly and periodic manner. In doing so, GDPT shall collaborate not only with public organizations but also with private sectors.

3) Revaluation

GDPT is required to conduct revaluation according to the frequency stipulated in the relevant tax law. Note that there is high possibility that the use category of an area is reclassified, when significant change in value influence factors is recognized within the same area. Also, it is strongly encouraged to reflect the relevant data, which has been collected on daily basis, on the revaluation procedures.

4) Modality of Disclosure

After completing the revaluation and necessary preparation period, GDPT should allow taxpayers to view the value of their properties under certain conditions regarding time, place and method.

II KEY PRINCIPLES OF VALUATION

II-1 Target of Valuation

Both land and building, that compose property, are subject to appraisal of value under this Valuation Standards.

In appraising the value, this Valuation Standards designates parcel as the basic unit of valuation for land, and flat as the basic unit of valuation for building.

<EXPLANATION>

Traditionally, GDPT has been conducting valuation depending on the size of land: if a building is standing on a parcel of land with its area less than 1.7 dunom, the focus of valuation is on the building only; if a building is standing on a parcel of land with its area equal to or more than 1.7 dunom, the focus of valuation is on both the building and the remaining part of the land, i.e., the area that is not being used as the built-up area for the building. On the other hand, if the land is vacant or the construction of the building on the land is not complete, the focus of valuation is on land only.

Under this Valuation Standards, the focus of valuation continues to be on both buildings and land. However, there will be no marker, in terms of land size, which will dictate whether the valuation is conducted only for buildings or for both buildings and land. In other words, valuation will be conducted for both buildings and land, irrespective of land size. Hence, in contrast with the traditional valuation principle where valuation fell into one of the three categories depending on the existence of buildings and the size of the land, there are only two categories under this Valuation Standards: buildings and land.

II-2 Base Date of Valuation

Certain date is set as the base date of valuation for all properties in Palestine.

<EXPLANATION>

The values of properties change according to the changes of statuses of value influence factors

with the lapse of time. By setting the base date for property valuation, accountability of valuation will be strengthened.

In future it is desirable to set one unified base date for the property valuation in Palestine so as to maintain the equality between municipalities in this regard.

II-3 Bases of Property Valuation

Base of valuation for land is market value, while base of valuation for building is rental value.

<EXPLANATION>

The reason behind this is that it is rather easy to obtain data samples for rental value of building, while that is not the case for land (especially large vacant land). For land, using market value is more convincing due to its higher level of objectivity and universality.

a) Market Value

Market value can be defined as the estimated amount for which a property should be traded on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.

b) Rent Value

Rent value can be defined as the typical rent or lease payment that would be required to obtain the exclusive right to occupy and benefit from a property. Under the rent value approach in Palestine, property is assessed according to an estimate of current rental value. Rent value is the basis of valuation under the Jordanian "Act regarding Building and Land in the Region of Municipalities and Local Government" of 1954³ and it will remain so for buildings under this Valuation Standards.

c) An important notice for adopting market value as the base for land valuation

Principally, property valuation is conducted based on the data officially recorded and registered

³ See, *inter alia*, articles 7 and 13.

in ledger. In this view, the data used for land valuation and recorded currently in the ledger books of GDPT, as well as the database in which the digitized data from ledger books are incorporated, are based on rent value. The reason being that in the Jordanian "Act regarding Building and Land in the Region of Municipalities and Local Government" of 1954, it is defined that the property valuation shall be based on rent value, and the valuation practices in Palestine have been based on rent value until today. While it is desirable to be based on actual market transaction data collected and accumulated when conducting the land valuation based on market value, in order to conduct the land valuation based on market value under the situation in which only the rent value data exist in ledger books and the database, it is necessary to convert, step by step, the rent value recorded in ledger books into market value.

For that reason, in this Valuation Standards roughly following two steps are laid down.

First step: When this Valuation Standards is applied first time, compute the market ratio⁴ and work out the provisional market value by multiplying the current rent value with market ratio.

Second step: Collect and accumulate the actual market transaction data continuously until the necessary data for valuation is provided, and adopt the average of transaction values (market price) that are organized quarter/block-wise as the market value data for valuation (see Annex 1 for details).

d) An important notice for adopting rent value as the base of building valuation

The valuation of building has already been conducted based on rent value. However, it is known that not a small number of rent value data registered on ledger books are deviated from actual values in rental property market. In order to address this issue, it is essential to collect and accumulate the actual property rental data continuously and gradually shift the building valuation practices to be based more on reliable data set.

II-4 Key Modalities of Valuation

This Valuation Standards adopts Area-based Approach as the basic methodology for property valuation. In the efforts to secure its fairness, simplicity and neutrality, methods commonly used

⁴ See section III-2-D for calculation methods of market ratio.

through Sales Comparison Approach are also incorporated into this Valuation Standards.

<EXPLANATION>

Since the property valuation in Palestine has been conducted under the Jordanian "Act regarding Building and Land in the Region of Municipalities and Local Government" of 1954 which adopts rental value as the base of valuation, this Valuation Standards stands on this legal basis and follows the customary practices based on it. As for the land valuation, however, market value is adopted as the base of valuation in this Valuation Standards. This is to comply with the GDPT's official position that it should adopt market value for the base of land valuation.

In this connection, based on the judgment that the adoption of CAMA (Computer Assisted Mass Appraisal) widely applied in many developed countries is not feasible due to the lack of necessary data in Palestine, it was decided to apply Area-based approach in which a massive amount of data is not required. In order to complement the relative inaccuracy of valuation endowed in Area-based approach, combination with Value Adjustment Matrix used in the sales comparison approach was also decided.

When applying the Value Adjustment Matrix, it is necessary to identify the target area. In the context of Palestine, firstly the municipality and secondly the quarters/blocks delineated within municipalities will be the target area for the application of Value Adjustment Matrix.

The basic steps for the application of Value Adjustment Matrix will be outlined as follows:

Firstly, work out the standard value per unit area (JD/m²) of the target area by usage category.

Secondly, use Value Adjustment Matrix to derive the net adjustment weight for the particular property. In developing Value Adjustment Matrix, however, it should be prepared based on different usage categories since the particular properties have different combinations of value influence factors according to their usage (i.e. residential, commercial, industrial and tourism). In other words, in order to apply Value Adjustment Matrices prepared based on different usage categories, the target area (quarter/block) should also be classified based on different usage categories.

Thirdly, calculate the value of particular properties by multiplying the standard values with net adjustment weights. As a matter of course, since the results of valuation change according to the

size of the property, the final valuated figure will be worked out by multiplying the value of particular property by area.

In summary, the following will be the basic procedures for valuation in this Valuation Standards.

- a) Calculate the standard values per unit area (JD/m²) by usage categories in target quarter/block
- b) Apply the Value Adjustment Matrices and net adjustment weights

For the details of modalities of valuation, see Annex 2 (Types of Valuation Approach).

II-4-A Categorizing municipalities and calculating Standard Land Reference Values

Identify the category of each target municipality. Calculate the reference standard values from the entire land properties of a municipality (Standard Land Reference Values). The Standard Land Reference Values are set for (i) understandings level of a quarter/block's standard value in the municipality; and (ii) also grasping level of the municipality among municipalities in terms of land value.

<EXPLANATION>

The categorization of municipalities is required based on following reasons.

A level of property value varies from area to area in accordance with different characteristics of an area. Such varieties normally exist due to various forms of differences in population size, density, degree of urbanization and other elements to characterize locations. One of such typical areas is an administrative unit of a municipality. Simply put, property values differ between large municipality and small municipality. Accordingly, it is necessary to classify municipalities in accordance with an average level of value that can be set and calculated at each municipality. Besides, composition of factors which influence and determine property values vary by different settings of municipalities. Because of this, it is of vital importance to classify municipalities and to set up such composition of value influence factors in accordance with municipals' characteristics.

Each governmental administration office classifies municipalities for the purpose of its given

mandate. For the purpose of property taxation GDPT should categorize the municipalities. This Valuation Standards adopts the Municipality Categorization which GDPT has already been conducted. (See Annex 3 for the Municipality Categorization)

Upon the identification of the category of each target municipality, calculation of the reference standard values from the entire land properties of a municipality shall be made (Standard Land Reference Value). The Standard Land Reference Values are set for (i) understanding the level of a quarter/block's standard value in the municipality; and (ii) also grasping the level of the municipality among municipalities in terms of land value.

Also, this Standard Land Reference Value needs to be calculated constantly in order to be utilized for the future review of existing categorization.

For the information with regard to the calculation method of Standard Land Reference Value for entire municipality by usage categories (residential and commercial) and its actual utilization, refer to Annex 4.

II-4-B Calculating standard value of quarter/block by usage category

Calculate the standard value of target quarter/block for each of the following four (4) usage categories.

- 1) Residential area
- 2) Commercial area
- 3) Industrial area
- 4) Tourism area

Standard value is a value virtually set for each of the four (4) usage categories per quarter/block. It is the value of a property (either land or building) when all attributes of it is considered to be standard. In appraising the value of each property, the standard value of its quarter/block is what the final appraised value will be based on.

Standard value for land is derived from land market value, and standard value for building is derived from flat rental value.

The usage of land property is determined based on the usage category designated in the Physical Master Plan as of the base date of valuation, while the usage category of building is determined based on field inspection.

<EXPLANATION>

The usage category is required based on the following reasons.

To cite one example, a busy area where the traffic of people and vehicles are heavy is considered as relatively high value area for commercial use, while it may be regarded as not very suitable for residential use with relatively lower value. Due to such relations between usage of the properties and their values, clarification of the usage categories of the property is required.

Municipalities are divided into quarters/blocks, and in calculating the standard values for these quarters/blocks, it should be done separately by each usage category.

On quarters and blocks:

The basic idea of quarters and blocks is explained herein, in order to avoid the confusion between quarters and blocks when conducting property valuation. In case when a municipality sets quarters within its proximity, the quarters will be regarded as the basic geographical unit for property valuation, while the blocks will be adopted only in the case when there are no quarters set in a municipality.

Blocks are originally introduced as the unit for taxation purpose during the time of British mandate. Though the Palestinian Authority took over this block, in some municipalities the populations have significantly increased and in order to conduct the valuation efficiently, the authority divided some blocks into quarters. On this account, the quarters are part of a block and as they are both regarded as unit for tax valuation, there is no difference between them.

Hence, quarters is regarded as the basic geographical unit for the property valuation and only in the municipalities where there are no quarters, the blocks will be adopted as the basic geographical unit for valuation.

For the details of clarifying and identifying usage categories, see Annex 6.

II-4-C Applying Value Adjustment Matrix based upon property's value influence factors

Value Adjustment Matrix, which is a tabulated set of data indicating adjustment weight per each valuation influence factor in accordance with the category of municipality as well as usage category of property, is prepared based on degree of differences between the standard value of a quarter/block and the value of individual property within the same quarter/block. Adjustment weights on value influence factors are used as the tool to appraise the value of individual property in comparison with standard value.

<EXPLANATION>

All properties within a quarter/block will be appraised based on the standard values calculated through the procedures described above. In conducting the valuation of each property within a quarter/block, it is necessary to reflect the difference of value influence factors as against the standard value of the quarter/block, and in order to do so the Value Adjustment Matrix will be applied.

A Value Adjustment Matrix is a table consisting of indices that reflect the difference between the standard value and the value of target property by each value influence factors, and is an important element of this Valuation Standards.

The main reasons to apply Value Adjustment Matrix are described in the following:

Firstly, by applying Value Adjustment Matrix, the valuation can be conducted rather systematically and it also automatically leads to maintain the appropriate balances of valuation results between different properties.

Secondly, by applying Value Adjustment Matrix, the time and manpower required for the valuation activities can be saved. The valuers, when they conduct valuation in the field, they no longer have to decide which value influence factors to be applied and instead they can use the value influence factors preset for particular usage and municipality codes.

Application of Value Adjustment Matrix will lead to the efficiency of valuation activities in Palestine where both human and financial resources are not abundant.

The basic idea of Value Adjustment Matrix is explained herein:

The value of the property consists of the combinations of various value influence factors listed below (for the information of value influence factors in general, see Annex 7).

- a) Natural and physical condition factors (sunlight, ventilation, moisture)
- b) Social condition factors (accessibility to public transport, etc.)
- c) Land condition factors (landform, ground condition, soil, etc.)
- d) Building condition factors (structure, completion year of building, etc.)
- e) Connecting road factors (structure, width etc. of connecting road)

The value influence factors listed here are just general ones and their levels of influence differ among municipalities. More specifically, there are factors strong in big municipalities while weak in smaller municipalities similar to rural areas and likewise, there are factors important in commercial areas but not so important in residential areas, and same thing can be said in the cases of Palestine.

This Value Adjustment Matrix for this Valuation Standards is formulated by selecting the value influence factors appropriate for Palestinian situation and accordingly the differences between the characteristics of municipalities, as well as the usages needed to be incorporated. In the context of formulating this Value Adjustment Matrix, there were necessities to actually reflect the different relations between areas (municipality category) and properties as well as different usage (residential, commercial, industry and tourism) and properties, as explained in sections II-4-A and II-4-B.

As the result, this Value Adjustment Matrix consists of a total of 16 sheets derived from 4 different municipality categories that reflect the relations between areas and property values, as well as from 4 different usage categories (residential, commercial, industry and tourism) that reflect the relations between usages and property values.

III PROCEDURES OF VALUATION

III-1 Identifying Municipality Category

Identify and confirm the category of municipality which the target municipality belongs to. The category of municipality shall be based upon the categorization set by the GDPT.

<EXPLANATION>

The results of the categorization of municipalities are shown in Annex 3. GDPT decides and conducts the categorization by taking the size, economic status, etc. into account, and review it at the time of revaluation when judged appropriate. In doing the municipality categorization, it is desirable to use officially publicized materials.

III-2 Calculating Standard Land Market Value

Standard Land Market Value is determined through the following procedure.

III-2-A Preparing data

Obtain and prepare the following data.

- 1) Quarter/Block Map (from GDPT or municipality)
- 2) Ledger book data
 - (a) Estimated year
 - (b) Block number
 - (c) Quarter number
 - (d) Parcel number
 - (e) Area size
 - (f) Rental value per square meter
 - (g) Rental value of parcel
- 3) Land usage category (reclassify the usages on Physical Master Plan into four (4) usage categories)

(Land Usage Category)

Residential (1)

Commercial (2)

Industrial (3)

Tourism (4)

<EXPLANATION>

- Quarter /block number and Parcel number

Confirm the quarter/block number and parcel numbers subject for valuation in P-TAX. In case the target property is not registered in P-TAX, use block map etc. to identify the quarter/block number and parcel number of the target property.

- Data verification of quarter/block

Ensure the quarter/block information is updated on block maps and Physical Master Plan. Request the municipality that has jurisdiction for preparing the block maps, if necessary.

III-2-B Calculating average land rental value by usage category

Filter the data set listed above to the latest estimated year of parcel. Classify it into either one of the four (4) usage categories. Excluding outliers, calculate average above (f), the rental value per square meter.

<EXPLANATION>

For both lands and buildings, the standard rental value will be calculated based on average of samples in this Valuation Standards. The reasons being that the calculation of average is easy and it implies the representativeness, and considered appropriate to indicate the standard of samples.

For the methodology to calculate the average, see Annex 4 and 8.

1) Basic idea of standard land rental value

Calculation of standard rental value will be based on the data recorded in ledger book for

municipality. More specifically, work out the standard rental value of each quarter/block by using rental value data (after trimming outlier, abnormal values of upper and lower 1%) on appropriate ledger book, as described below.

It should be noted that the “standard rental value” is a *conceptual value* which will be applied to the “standard” category in the Value Adjustment Matrix, and does not mean that there is an actual parcel as standard property.

When parcels of more than one usage category exist in a quarter/block, calculate the standard rental value for each category.

2) Assessment methodology

- Standard rental values of residential and commercial usage

Utilize the rental value data prepared in step III-2-A. Sort these data by quarters/blocks and calculate the average separately by usage category (residential, commercial, industrial and tourism). In most cases, however, usages of a quarter/block may fall into single usage (residential) category.

- Standard rental value of industrial usage

Calculate the standard rental value only in the case when industrial usage category exists in target municipality. Methodology for calculation will be based on that of residential and commercial usage categories.

3) Note on “case with limited samples”

In case when sample number in each quarter/block is less than 30,* determine the standard rental value by carefully taking following aspects into account.

- Take into account the balance of standard rental values with adjacent quarters/blocks.
- Conduct balance check with adjacent quarters/blocks. Typically, areas with similar characteristics will have similar values.

* On the notion of sample number of 30:

- From the experience of valuation trials, it is empirically agreed that when around 30

samples exist, relatively stable figure as average can be obtained.

- As a matter of course, this figure of 30 is not an absolute line. In quarters/blocks where deviations among samples are small, less number of samples can be considered.
- Accuracy can be improved when higher sample number is set while it will entail larger workload to examine the balances. On the contrary, if sample number is set too small, workload can be minimized with the cost of accuracy. As mentioned above, figure 30 is not an absolute one and can be adjusted by weighing the balance between accuracy and workload.

4) Note on “working by usage category”

This Valuation Standards requires to process data of each quarter/block by usage categories. This is because there are cases having different usage categories such as residential and commercial within the same quarters/blocks and it requires the separate calculation of standard rental values by different categories, since different usage categories have different structures of value influence factors.

5) Note on “latest data”

An example of database making with MS Excel by obtaining the data from P-TAX system is shown below. This example is the case sorted the latest year of valuation for parcel 10. See also Annex 8 for more information.

EST_YEAR	BLOCK_N	QUARTER_I	PARCEL_NO	EST_AREA	EST_METER_PRICE	EST_PARCEL_VALUE
1985	28	1	10	1323	1.5	1985
2009	28	1	10	1323	7	9261
2011	28	1	10	1323	7	9261
2012	28	1	10	1323	7	9261
1985	28	1	11	1685	1.5	2528

III-2-C Determining Standard Land Rental Value of quarter/block by usage category

Refer to the Land Reference Standard Values as needed in order to assess the relevance of the average value obtained in III-2-B, and determine the Standard Land Rental Value (A) of quarter/block by usage category.

Standard Land Rental Value = (A)

<EXPLANATION>

Standard Land Rental Value will be determined based on the average value obtained in above step III-2-B. However, in the case where the Land Reference Standard Value for municipality is worked out in prior, compare the average with Land Reference Standard Value for verification and review figures when judged necessary before determining the Standard Land Rental Value.

For example, in case when valuating on a municipality where the level of urbanization is high among municipalities but the average figure calculated appeared drastically low as against its Land Reference Standard Value, there can be the possibility of miscalculation or other errors in the process. In such a case, verification by reviewing of Land Reference Standard Value and/or by reviewing with each criterion adopted in municipality categorization is desirable.

III-2-D Calculating Standard Land Market Value of quarter/block by usage category

Multiply the Standard Land Rental Value (A) with the market ratio in order to determine the Standard Land Market Value (B) of quarter/block by usage category. This particular task is performed only once at the first time when this Valuation Standards is applied.

$$\text{Standard Land Market Value} = (B)$$

<EXPLANATION>

- As mentioned in section “II-3 Bases of property valuation,” valuation for land will be based on market value, and in the first year of application of this Valuation Standards, the market ratio is applied in order to work out the Standard Land Market Value by usage category.
- Market ratio is the figure applied only once when this Valuation Standards is applied first time and from next occasion (i.e. revaluation etc.) the valuation will be based on market condition’s adjustment or sufficient number of market transaction data of land property, as explained in Annex 1. Calculation method of the market ratio is described in the following.

- 1) Collecting and analyzing the market transaction data of land

Collect the transaction data of the land property by usage category in order to work out market ratio, and calculate the average (JD/m²) after omitting irregular cases.

While under normal circumstances it is desirable to work out the standard level of land market value directly from land transaction data in order to assess land property for property tax based on market value, in Palestine transaction data are presently scarce and it is judged infeasible. On that account the method to apply market ratio to work out the Standard Land Market Value is adopted.

In this method, for a start collect the land transaction record (transaction data) of the entire target municipality by usage, by taking into account following aspects.

- Prioritize recent records (i.e. within 5 years from valuation time) of transactions since later ones are considered more reliable.
- Omit the transaction case of excessively large parcel (roughly >3,000 m² as standard).
- Omit the cases of transaction with which the special interests can be inferred such as the transactions between family relatives.

Enter the transaction data collected into MS Excel and by utilizing this data set, calculate the average by usage category after omitting upper and lower 1% of transaction unit value as outliers.

2) Work out the average rental value of the properties listed in land transaction data

Calculate the average rental value (JD/m²) of the properties corresponding with the land transaction data by usage category, by obtaining the rental value data from ledger book.

This task can be done just by utilizing the data prepared in step “III-2-A” and calculate the average of rental values by usage.

In abstracting the rental value data that corresponding with land transaction data, there may be the case in which the parcel number cannot be collated. In such a case the cause should be identified within GDPT and when the rent value for that particular parcel found to be inexistent, appropriate measures such as omitting this transaction case should be taken.

3) Calculation of market ratio

Basing on the results obtained in above steps 1) and 2), work out the ratio between average transaction price per unit by usage and average rental value per unit of corresponding land properties.

“(average transaction price per unit by usage) / (average rental value per unit of corresponding land properties) = market ratio”

By going through above steps, the market ratios of the target quarter/block by usage can be calculated.

It should be noted that in Palestine under current situation, especially in rural areas, it is considered difficult to collect the sufficient amount of land transaction data. On that account, when it is judged difficult to apply above steps, it is suggested to adopt proxy market ratio prepared according to the municipality category as listed below.

Category A: 30 times *

Category B, C and D: 20 times *

* These figures are obtained from verification results in sample areas. The results indicated the tendency of higher ratio in large cities than in rural towns. However, it should be noted that there were limitation of sample areas and difficulty to obtain actual transaction data. As explained in Annex 1, accumulation of the transaction data for more accuracy and reliability is seriously desired.

III-3 Calculating Standard Building Rental Value

Standard Building Rental Value is determined through the following procedure.

III-3-A Preparing data

Obtain and prepare the following data.

- 1) Quarter/ Block Map (from GDPT or municipalities)
- 2) Data from ledger book
 - (a) Estimated year
 - (b) Block number

- (c) Quarter number
- (d) Parcel number
- (e) Building number
- (f) Floor number
- (g) Flat number
- (h) Rental value per square meter
- (i) Flat sequence number

3) Obtain the following data from the field survey.

- (j) Flat usage classification

4) Obtain the following data from building permit and field survey etc.

- (k) Floor area size
- (l) Flat area size
- (m) Flat count per floor

<EXPLANATION>

For some data which is considered difficult to obtain solely by GDPT (i.e. (k), (l) and (m) in above list), GDPT should work with other public organizations such as municipality, etc.

III-3-B Calculating the average building rental value of quarter/block by usage category

Filter the dataset above to the latest estimated year per flat. Divide it into four groups according to the actual usage category (Residential, Commercial, Industrial and Tourism). After excluding the outliers, calculate the average of (h) rental value per square meter.

<EXPLANATION>

1) Basic idea of standard building rental value

Calculation of standard building rental value will be based on data recorded in the ledger book of target municipality. More specifically, work out the average of building rental value for each quarter/block by using rental value data (after trimming outlier, abnormal value of upper and lower 1%) on appropriate ledger book, as described below.

It should be noted that the “standard building rental value” is a *conceptual* value which will be applied to the “standard” category in the Value Adjustment Matrix and does not mean that there is a building or a flat which can be regarded as standard property.

When buildings of more than one usage category exist in a quarter/block, calculate the standard building rental value for each usage category.

(Usage categories for building)

Residential

Non-apartment building (1)

Apartment building (2)

Commercial (3)

Industrial (4)

Tourism (5)

2) Assessment methodology

- Standard building rental value for residential and commercial usage

Utilize the rental value data prepared in step III-3-A. Sort these data by quarters/blocks and calculate the average separately by usage category (residential, commercial, industrial and tourism). In most cases, however, usages of a quarter/block may fall into single usage (residential) category.

- Standard building rental value of industrial usage

Calculate the standard rental value only in the case when industrial usage category exists in target municipality. Methodology for calculation will be based on that of residential and commercial usage categories.

3) Note on “case with limited samples”

Comply with the explanation 3) described in section III-2-B.

4) Note on “latest data”

As in the case for land valuation, prioritize recent records since later ones are considered more reliable.

III-3-C Determining Standard Building Rental Value of quarter/block by usage category

Verify, as needed, the average value obtained in III-3-B by referring to the statistical data, and determine the Standard Building Rental Value of quarter/block by usage category. (C)

$$\text{Standard Building Rental Value} = (C)$$

<EXPLANATION>

While the standard rental value for building is desired to be worked out by utilizing the accumulated data extracted from evidential documents such as rental contracts through statistical procedure, at the introduction stage of this Valuation Standard the data stored in P-TAX system shall be utilized.

The statistical data that can be referred to at this step are, for example the building cost index, etc.

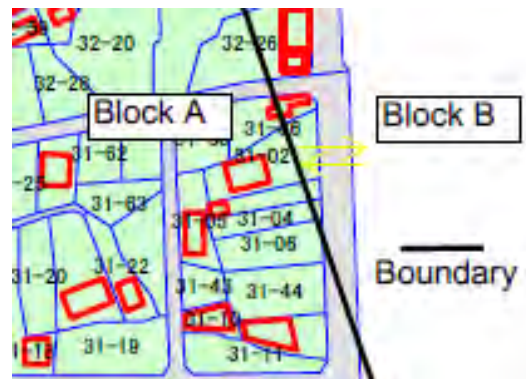
III-4 Identifying the location of target properties in Quarter/Block

Identify the location of target property on the block map.

<EXPLANATION>

Based on the data prepared in step III-2-A, identify the locations of target properties on quarter/block map.

When the boundary between two quarters/blocks do not coincide with the boundary of the properties (i.e. a property straddles across the border of two quarters/blocks), identify the main road which the property faces. The quarter/block in which the main road locates is the quarter/block the property in question should belong (in the case shown in right, Parcel 31-02 belongs to Block B).



III-5 Valuation of Land

III-5-A Identifying parcel number

Identify the parcel number of the target land using block maps, Physical Master Plan and other existing sources.

In case if block maps are unavailable, ask municipality to prepare them.

<EXPLANATION>

In principle, a parcel number should be identified by collating the P-TAX data and the block map (all data of GDPT's ledger books have been digitized in P-TAX as database and in P-TAX, data for registered properties are obtained from "Table of Rights (Tabo)" updated by PLA while data for unregistered properties are obtained from "Table of Ownership" updated by municipalities).

When there are parcels that cannot collate, either P-TAX or block map data may have error and this error should be identified and corrected.

III-5-B Identifying parcel area size

Identify the parcel area size by referring to existing data.

Parcel area size (m²) (D)

<EXPLANATION>

In principle, the land area registered in P-TAX is regarded as the parcel area size for valuation. When the property is a building, the area size of the land on which the building stands registered in P-TAX is used for valuation (all data of GDPT's ledger books have been digitized in P-TAX as database and in P-TAX, data for registered properties are obtained from "Table of Rights (Tabo)" updated by PLA while data for unregistered properties are obtained from "Table of Ownership" updated by municipalities).

- In case the parcel area information is obtainable from the document

When the parcel area size is recorded in Table of Rights (Tabo), it should be entered in P-TAX and used as area size. If no Tabo and P-TAX data exist and the property's municipality holds a document with data related to land area, such data can be used. Examples of such documents are as follows.

- Building permit
 - Detailed plan
 - Others
- In case the parcel area information is not obtainable from the document

When the parcel area size information is unavailable, the land area size will be measured and obtained from the latest block map.

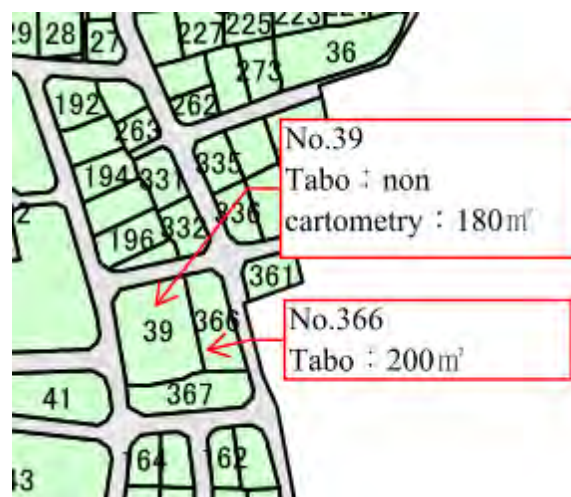
Several methods can be used to measure the land area from the block map, such as measuring an analog drawing or geographic information system (GIS). When the land area size measured from the map differs significantly from the neighboring parcel area sizes registered in Tabo and P-TAX, the parcel in question shall be visited and the frontage and depth of the land should be measured to confirm the reliability of data.

The following is an example in which the land area size (measured from a map) differs significantly from the neighboring parcel land sizes recorded in Tabo and P-TAX.

Example:

The area size of Parcel NO. 366 is 200 m² according to Tabo and P-TAX, and the area size data of Parcel No. 39 is not obtainable from Tabo and P-TAX.

Although the area size of Parcel No. 39 is apparently larger than that of Parcel No. 366 on a block map, the area size measured based on block map was 180 m², which is smaller than 200 m² of Parcel No. 366. In such a case, investigation of possible cause, such as rechecking the accuracy of block map and land area size of Parcel No. 366 registered in Tabo and P-TAX, are required.



- Others

Decimal point of land area size data (number) shall be treated as has always been.

III-5-C Identifying the usage category of land

Identify the usage category of land from either one of Residential, Commercial, Industrial and Tourism.

<EXPLANATION>

Identify the usage category of land, with referring Annex 6. Materials to be utilized for this task are Physical Master Plan, etc. obtained from municipality.

III-5-D Collecting required data referring to the value influence factors

Conduct survey to collect required data referring to the value influence factors.

<EXPLANATION>

On value influence factors of land parcels, the “explanation” of Section III-5-E lists the relevant factors included in Value Adjustment Matrix, and these factors require the field survey. Actual survey methods will be described in “HANDBOOK”⁵ which is separately prepared.

III-5-E Applying Value Adjustment Matrix

Based on the result of survey, determine the adjustment weight of each value influence factor by referring to the relevant Value Adjustment Matrix. Multiply all the adjustment weights to compute the Net Adjustment Weight.

Net Adjustment Weight (E)

<EXPLANATION>

⁵ Handbook for Valuators: Field Guide to Property Valuation Standards in Palestine

For land properties, in principle the Value Adjustment Matrix with following factors shall be applied. Supplementary explanation is made in Annex 7. It should be noted that there are slight differences in Value Adjustment Matrix among different usage and municipality categories.

(Factors in Value Adjustment Matrix for land valuation)

- Road width
- Road linkage
- Pavement
- Access to the center of municipality (for applicable municipality)
- Utilities (water, sewerage, electricity, gas etc.)
- Parcel frontage
- Parcel shape
- Parcel area size
- Topography

By multiplying all adjustment weights of these factors, a ratio (Net Adjustment Weight: a composite of all adjustment ratios for valuated property based on designating 1.00 to all factors of standard land value) which indicates the difference of values between standard land value and the value of the valuated property will be worked out.

An example of calculating the Net Adjustment Weight is shown below.

In this example, by multiplying all nine adjustment weights from “Width: 1.00” until “Topography: 1.00” (in yellow colored frame), the Net Adjustment Weight 1.02 (in red colored frame) is worked out.

Commercial Land Ctg2						Land								Standard Value (JD/m ²)	Date	
Block No		Quarter No												3.90	(from - to)	
Parcel No	Bldg No	Floor	Flat No	Plot seq	Area(sqm)	Width	linkage	Pavement	Access to the Center of Municipality	Water,Electricity,etc.	Frontage	Shape	Area	Topography	Net Adjustment	Appraised Value
						C-1	C-2	C-3	C-4	C-8	C-10	C-11	C-12	C-13		
1	53				265.00	Standard	Standard	Paved	Standard	Standard	Corner Lot	Standard	Standard	Standard	1.02	1,054.17

When applying Value Adjustment Matrix, attribute data of relevant factors (road width, linkage, etc.) for all valuated parcels will be required. The actual survey methods will be described in

the “HANDBOOK” which will be separately prepared.

III-5-F Calculating parcel market value

Multiply the Standard Land Market Value (B) with the parcel area size (D) and with the Net Adjustment Weight (E) to obtain the parcel market value (F).

$$(B)*(D)*(E) = \text{Parcel Market Value (F)}$$

<EXPLANATION>

This step is taken to work out the parcel market value of the target property in a quarter/block. Specifically, it is to multiply the Standard Land Rental Value (A) with the market ratio to determine the Standard Land Market Value (B), then multiply (B) with parcel area size (D) and Net Adjustment Weight (E).

III-6 Valuation of Building

<EXPLANATION>

A building to be valued will satisfy either of the two standards described below.

Standard 1: A building registered in Tabo (Table of Rights) or Table of Ownership.

Standard 2: A building that satisfy all the following three conditions.

(1) Shutting off the outside air (with roof, walls, etc.)

Essentially, a building is used by people for habitation. Therefore, a living space suitable for such use must be secured. To ensure the living space, the outside air must be at least shut off with roof and walls.

The following is an example in which the outside air is not shut off.

Sample picture 1

The roof at the right side of the building and the pillar section are independent of each other, so no walls exist. Therefore, this structure cannot be recognized as a building.



(2) Fixity (permanently fixed to the ground)

Because a building is a fixture of land, a building must be physically and permanently fixed to ground.

The following is an example of a building without fixity.

Sample picture 2

The building is placed on a floor post footing and the building itself is made of light materials, so the building is confirmed to have no fixity.



(3) Usefulness (use in accordance with the purpose)

A building is constructed for a specific purpose. Therefore, a building must be used in accordance with its purpose. In other words, a building must be constructed suitably for its purpose.

The following is a case where no usefulness is admitted as a building.

Sample picture 3

The building can shut off the outside air and is physically and permanently fixed to the ground.

Although the building seems to be used as a residence, no fittings such as window frames, no water tank, and no electric equipment exist.

Therefore, the building cannot be used as a residence (i.e. no usefulness admitted as a building).



○ Basic unit of building for valuation

A flat ⁶ is designated as the basic unit of building for valuation in this Valuation Standards. It should be noted herewith that the subsequent description on the term ‘flat’ is slightly different from its definition stated in Palestinian Building Standard Act⁷ taking into considerations the effectiveness to be used for GDPT.

The term ‘flat’ in this Valuation Standards can be defined as a separate and self-contained premises having a roof (or ceilings) and walls that forms a confined space which is independently used for a certain purpose of usage under a single management. In line with this, a building which is constituted of several flats that are either vertically or horizontally connected is referred to as ‘apartment building’⁸ in this Valuation Standards. On the other hand, a building consisting of a single flat or two flats is considered as an independent housing unit in this Valuation Standards.

⁶ In this Valuation Standards, the English term ‘flat’ is used as synonym of the word ‘apartment.’

⁷ Organizational Use of Building and Organization Regulation for Local Authorities No. (5) of 2011

⁸ The terms ‘Multi Apartment Building’ are stated in the Palestinian Building Standard Act defining as ‘the building that is composed of three apartments or more. In other words, a building composed of two apartments cannot fall into this terms. In this Valuation Standards, a building composed of two apartments cannot be connoted as a flat, and thus can be grouped into non-apartment building.

III-6-A Identifying building number

Identify the building number according to existing data on ledger book. If no data exists, allocate a number to each building within a parcel. When more than one building stands on a parcel, number them in order of the year of completion.

<EXPLANATION>

The numbering for the building shall follow the rules described below.

(a) Building No. in Roll

The building No. in Roll indicates a number assigned to each building when more than one building exists on a parcel.

1) Setting method

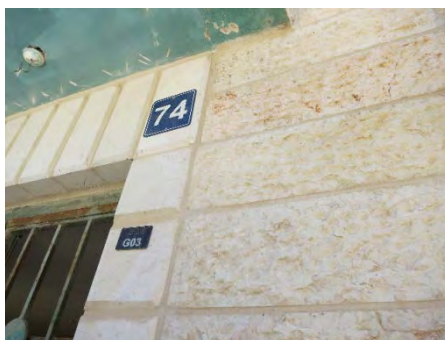
The building number is determined and enrolled based on the building number provided in P-TAX. When there is only one building on a parcel, its Building No. in Roll is zero (0).

2) Note

When the appearance of a building is renewed due to extension and/or remodel, the initial Building No. in Roll stays the same. However, when the building is reconstructed, a new Building No. in Roll is assigned and entered.

When the actual building number has been assigned to a property, this number must also be noted down. The important point to keep in mind is that the actual building number differs from the Building No. in Roll. The following picture is an example of the actual building number.

Sample
Picture4.



(b) Floor No.

When the property is a building with multiple floors, the Floor No. indicates which floor of the building the property locates.

1) Setting method

The Floor No. is determined and enrolled based on floor-related information provided by P-TAX. Basically, “0” is assigned to the floor facing a main road, “1” is assigned to the floor one level up of the floor “0”, and the number continues to go up. Likewise, “-1” is assigned to the floor one level down of floor “0”, and the number continues to go down.

The following is an example of assigning the floor numbers.

Sample Picture 5.

“0” is assigned to the Floor that faces a main road and has a main entrance to the building.

**III-6-B Identifying flat number**

Identify the flat number according to existing data on ledger book. If no data exists, allocate certain number to the property.

<EXPLANATION>

When more than one flat exist within same floor of the building, assign numbers to each flat.

Example 1 below is the case in which assigned the serial numbers for each floor and Example 2 is the case in which assigned the serial numbers for an entire building (extracted from ledger book data).

Example 1

EST_YEAR	BLOCK_NO	QUARTER_ID	PARCEL_NO	EST_REASON	BLD_NO	FLOOR	FLAT_NO
2009	11	0	306	0	1	0	1
2009	11	0	306	0	1	0	2
2009	11	0	306	0	1	0	3
2009	11	0	306	0	1	0	4
2009	11	0	306	0	1	1	1
2009	11	0	306	0	1	1	2
2009	11	0	306	0	1	1	3
2009	11	0	306	0	1	2	1
2009	11	0	306	0	1	2	2
2009	11	0	306	0	1	2	3
2009	11	0	306	0	1	3	1
2009	11	0	306	0	1	3	2
2009	11	0	306	0	1	3	3
2009	11	0	306	0	1	4	1
2009	11	0	306	0	1	4	2
2009	11	0	306	0	1	4	3

Example 2

EST_YEAR	BLOCK_NO	QUARTER_ID	PARCEL_NO	EST_REASON	BLD_NO	FLOOR	FLAT_NO
2009	11	0	178	0	0	0	0
2009	11	0	178	0	0	1	1
2009	11	0	178	0	0	1	2
2009	11	0	178	0	0	2	3
2009	11	0	178	0	0	2	4
2009	11	0	178	0	0	2	5
2009	11	0	178	0	0	2	6
2009	11	0	178	0	0	3	7
2009	11	0	178	0	0	3	8
2009	11	0	178	0	0	3	9
2009	11	0	178	0	0	3	10
2009	11	0	178	0	0	4	11
2009	11	0	178	0	0	4	12
2009	11	0	178	0	0	4	13
2009	11	0	178	0	0	4	14
2009	11	0	178	0	0	5	15
2009	11	0	178	0	0	5	16
2009	11	0	178	0	0	5	17
2009	11	0	178	0	0	5	18
2009	11	0	178	0	0	6	19
2009	11	0	178	0	0	6	20

III-6-C Identifying flat area size

Identify the area size of the flat using the existing documents or obtaining from field visit.

$$\textit{Flat area size} = (G)$$

<EXPLANATION>

The flat area size indicates the total floor area of each residence. The unit used in this manual is square meter (m²).

The methods to identify the flat area size vary in accordance with the type of the property (non-apartment building or apartment building) and the documents available. See Annex 5 for details.

III-6-D Identifying usage category of flat

Identify the usage category of the flat according to the actual use.

<EXPLANATION>

In principle, the usage of the flat will be identified based on the actual usage at the time of valuation.

See Annex 6 for examples of flat usage identification.

III-6-E Collecting required data referring to the value influence factors

Conduct survey to collect required data referring to the value influence factors

<EXPLANATION>

The value influence factors incorporated in the Value Adjustment Matrix for building valuation are indicated in following section III-6-F. The actual survey methods will be described in the “HANDBOOK” which will be separately prepared.

III-6-F Applying Value Adjustment Matrix

Based on the result of survey in III-6-E, determine the adjustment weight of each value influence factor by referring to the relevant Value Adjustment Matrix. Multiply all the adjustment weight to compute the Net Adjustment Weight (H).

$$\text{Net Adjustment Weight} = (H)$$

<EXPLANATION>

For the valuation of the building properties, in principle the Value Adjustment Matrix with following factors will be applied. Supplementary explanation is made in Annex 7. It should be noted that there are slight differences in Value Adjustment Matrix among different usage and municipality categories.

(Factors in Value Adjustment Matrix for building valuation)

- Building age
- Quality of construction
- Floor location
- Upkeep and maintenance
- Flat area size
- Elevators
- Parking Space

By multiplying all adjustment weights of these factors, a ratio (Net Adjustment Weight: a composite of all adjustment ratios for valuated property based on designating 1.00 to all factors of standard land value) which indicates the difference of values between standard building rental value and the value of the valuated property will be worked out.

An example of calculating the Net Adjustment Weight is shown below.

In this example, by multiplying all seven adjustment weights from “Building age: 0.90” until “parking space: 1.00” (in yellow colored frame), the Net Adjustment Weight 0.812 (in red colored frame) is worked out.

Commercial Bldg Ctg2						Building								Standard Value (ID/m2)	Date				
Block No		Quarter No				Building Age	Quality of Construction		Floor Location		Upkeep and Maintenance		Building Area		Elevators		Parking Space	3.90	(from - to)
7																			
Parcel No	Bldg No	Floor	Flat No	(Flat seq)	Area(sqm)	C-14	C-15	C-16	C-17	C-18	C-19	C-20	Net Adjustment	Appraised Value					
1	53	2	-1	0	265.00	inferior	Inferior		Standard	Standard	Not Available	Available	0.812	839.20					

When applying Value Adjustment Matrix, attribute data of relevant factors (building age, quality of construction, etc.) for all valuated flats will be required. The actual survey methods will be described in the “HANDBOOK” which will be separately prepared.

III-6-G Calculating flat rental value

Multiply the Standard Building Rental Value (C) with flat area size (G) and with the Net Adjustment Weight (H) to obtain the Flat Rental Value (I).

$$(C)*(G)*(H) = \text{Flat Rental Value (I)}$$

<EXPLANATION>

This step is taken to work out the flat rental value of the target property in a quarter/block.

Specifically, it is to multiply the Standard Building Rental Value (C) with the flat area size (G), then further multiply it with Net Adjustment Weight (H) to work out the Flat Rental Value (I).

Annex 1: Basic Approach to Revaluation

It is oftentimes recognized that revaluation may be conducted in parallel with revision of valuation standards in order to make values of properties fairly optimized and balanced through reflecting socio-economic changes into valuation.

Revaluation is to be conducted every five years in Palestine. This Valuation Standards is formulated to best accommodate particular conditions prevailing in Palestine at the time of preparation, but for its future sustainable operation, it is strongly recommended to collect and manage relevant data required for valuation such as data relating to sales-and-buy transactions of properties including rental market transactions. Assuming that those data will be continually collected being accompanied with continued improvement of data management in the coming years, this Valuation Standards itself is needed to be revised in the future.

In line with this, this Annex is presented to describe a basic approach to revaluation to be undertaken in five years and ten years respectively after this Valuation Standards becomes effective. Also, the basic approach presented here is more of the result of focusing on feasibility than idealism.

The first revaluation is to be undertaken five years after this Valuation Standards shall come into effect. Considering five-year time span, it is assumed that by then people may have just become familiar with this Valuation Standards through its application and practice. It is also assumed that the aforementioned data collection with improved management may be still in process. Under such assumption, it would not be realistic to revise this Valuation Standards. Rather, revaluation would be more realistic and feasible if it shall be undertaken based on this Valuation Standards without revision but with minor adjustment.

More specifically, a method of market condition's adjustment is suggested to be conducted. The market condition's adjustment is an action to multiply the previously (i.e., five years ago) appraised value with a certain rate of change in transaction prices (including rental contract prices) that may incur over the five years. Such rate of change can be computed in accordance with each municipality category, though this shall be desirably reckoned per usage category per municipality category if conditions would be allowed to do so. In this way, newly appraised value to be obtained from the first

revaluation shall be the one assessed through market condition's adjustment on value previously (i.e., five years ago) appraised by this Valuation Standards. In case where any difficulty may exist for analyzing the rate of change, other appropriate index like construction cost index or consumer price index can be substituted.

By the time when the second revaluation shall be conducted, ten years should have passed since the adoption of this Valuation Standards, and people are expected to be accustomed to put into practice and administer it in a comfortable manner. Similarly, data collection and management is also expected to be sufficiently put in place. In such situation, it is considered that the method of market condition's adjustment would be rather too simple and inappropriate approach to be applied into revaluation.

In this assumption on the stage of the second revaluation, this Valuation Standards may be necessarily revised and applied for revaluation. Specifically, the method to calculate standard value of a quarter/block should be revised. Under the current Valuation Standards, a standard value is basically the average of properties' values (recorded in P-TAX) in the same use category within the same quarter/block. This method may be replaced by the other one through which a standard value shall be computed based on the average of actual transaction prices (for land) and rental contract prices (for flat) whose data might have been collected from each quarter/block over the years.

In case when taxpayers would strongly urge GDPT to disclose the standard values, another option for revising Valuation Standards is to select an actual property which can represent the standard value of the quarter/block by use category. Yet it should be noted that much time, energy and analytical thoughts shall be definitely required for such selection of the actual property. Also, this Valuation Standards is needed to be revised for this purpose.

Annex 2: Valuation Approaches

1. Types of Valuation Approach

Approaches of property valuation generally fall into two types: (i) individual property appraisal and (ii) mass appraisal. The latter has been devised and applied for property valuation for taxation based on established approach to individual property valuation. Thus, in the subsequent description, first approaches to individual property valuation shall be overviewed and followed by mass appraisal.

2. Approaches to individual property valuation

There are three approaches to appraising the market value of an individual property: namely, Sales Comparison Approach, Cost Approach, and Income Approach.

1) Sales Comparison Approach

The sales comparison approach appraises a property's value by reference to comparable sales. Focusing on marketability, this approach becomes persuasive when there are plenty market transaction cases that are obtainable. In this Annex, the sales comparison approach does include appraising individual property's rental value based on rental transaction data. The valuation procedure based on this approach is the following:

- a) Set target area of valuation. Target area is typically set by examining similarities in such factors as location, characteristics, area-size and quality.
- b) Collect transaction data (or rental price data for buildings/flats) from the target area and/or other areas that have similarities with the target area.
- c) Filter the data. Keep latest data, and exclude properties that have special condition or strong character like extremely irregular-shaped land.
- d) Make market condition's adjustment to the filtered price data.
- e) Derive index based on the gap between the target area and the data areas by comparing the factors affecting the price such as road width and location. Property tax valuation uses value adjustment matrix in deriving the index.
- f) Multiply the adjusted price data in d) with the index from e) to draw the appraised value of the target area.

2) The cost approach

The cost approach is based on the assumption that a rational, informed

purchaser would pay no more for a property than its construction cost. In this approach, the appraised value is derived from calculating the construction cost of a target property, and then subtracting depreciation. This approach is widely applicable when the target property is the combination of land and flat, or flat only; when the property is land only, the applicability is limited to cases like filled-up lands and subdivisions.

In the cost approach, one hypothesize that the same property is being constructed at the time of valuation, and refers to architectures and civil engineers to derive the cost of construction.

Depreciation adjustments can be done based on either economic life or observed-condition. The economic life method is classified into two ways: straight line depreciation and fixed rate depreciation. In observed-condition method, appropriate depreciation amount is derived by investigating the target property's appearance such as maintenance and repair condition.

3) The Income Approach

In this approach, the current value of a property is the net present value of future operating income to be gained through the property over the remainder of its economic life. Income approach is applicable when evaluating income-producing property such as rental apartments, shops and office buildings.

4) The relation between the three approaches and the base of valuation

The base of valuation is to adopt market value or rental value.

The relation between the base of valuation and the above three approaches to individual property valuation can be understood as follows.

The Sales Comparison Approach: Market Value or Rental Value (primarily market value)

The Cost Approach: Market Value

The Income Approach: Market Value

Since the property valuation in Palestine has been conducted under the 1954 Jordanian Property Tax Law¹, which adopts rental value as the base of valuation,

¹ Law No. (11) of 1954, The Law Concerning the Tax of Buildings and Land within the Areas of Municipalities and Local Councils

this Valuation Standards adopts rental value as the base of valuation. As for the land valuation, however, market value is adopted as the base of valuation. This is to comply with the GDPT's official policy that market value for the land valuation is suggested to be used. Thus, the sales comparison approach is employed as part of the methodology of property valuation in Palestine.

3. Mass Appraisal Approach

Mass appraisal methodology can be broadly categorized into two approaches: namely, (i) CAMA (computer assisted mass appraisal) and (ii) the Area-based approach. CAMA, adopted in the US for instance, is established built-in valuation model through statistically analyzing a massive amount of transaction data, hence the approach requires the presence of well-managed data and highly-skilled analysts as pre-requisites. In contrast, the Area-based approach is a rather simplified methodology which can be operational requiring fewer amounts of transaction data than CAMA. Due to the simplicity, property values appraised based on the Area-based approach have less accuracy than the ones by CAMA. To improve accuracy in valuation, the value adjustment matrix, which has been devised within the framework of the Sales Comparison Approach, is incorporated into valuation standards.

4. Area-based approach

This Valuation Standards in Palestine is formulated based on the Area-based approach. As motioned above, the Area-based approach is one of the mass appraisal methodologies built in Sales Comparison Approach, and it can be adopted in such situations where it is difficult to adopt CAMA due to scarcity of available market transaction data or limited human resources with less competency

In principle, this approach sets one standard value to one area for valuation. Historically the unit of "area" has ranged from "the whole country" to administrative unit area, depending on the existence of similarities of properties' features as well as availability of transaction data. In an extreme condition where a few transaction data would be available and situations of properties throughout the country would be by and large similar, it is theoretically possible to set one value, say 10 JD per square meters, to the entire land of the country. This approach tends to be employed when transaction data are not sufficiently collected and managed.

Each property has its own characteristics that eventually affect its value.

As mentioned above, the application of the Area-based approach results in setting up one value to one whole area with looser considerations on these characteristics of properties. In this sense, this approach is relatively weaker in securing the fairness. Thus, in order to maintain optimized and balanced values, this approach requires sub-divisions of a larger area into small ones for valuation and then assigns standard value to each one

In case of Palestine, the unit of block was established during the period of British Mandate, and the 1954 Jordanian Law stipulates the block as a unit of valuation as target area for valuation. The Area-based approach considers it the best to define each unit area by taking into account socio-economic attributes (e.g. residential environment, residents' social class, and population density) and physical attributes (e.g. geography and topography). Nevertheless, as Palestine is yet to establish a strong system that is capable of performing the significant amount of work required to redefine each unit area, this Valuation Standards is advised to continue adopting "block", as it was stipulated in the Jordan law and has long been experienced in property valuation, as the unit of valuation target area.

Annex 3: Categories of Municipalities

1. Category A includes the following municipalities:

Jenin, Tubas, Tulkarm, Nablus, Qalqilia, Salfeet, Ramallah, Al Beirah, Rawabi, Jericho, Bethlehem, Biet Jala, Hebron

2. Category B includes the following municipalities:

Qabatia, Arraba, Ya'bad, Anabta, Bietunia, Silwad, Birzeit, Arram, Biet Sahour, Dura, Yata, Athahria

3. Category C includes the following municipalities:

Alyamoun, Seelat Alharthiya, Seelat Athahr, Azzababdah, Tamoun, Aqqaba, ILLar, Ateel, Deir Alghusun, Sabastia, Assira Ashimaliya, Beit Foreek, Hawwara, Azon, Habla, Jayous, Bedia, Turmus'aya, Almazra'a Asharqiya, Attara, Dier Dibwan, Surda & Abu Qash, Al-Aizariya, Abudees, Aduha, Beit Fajar, Beit Ummar, Halhul, Alyasriya

4. Category D includes the following municipalities:

Kufur Ra'I, Albaladiya Almutahaditha, Jaba', Barqin, Marj Ibin 'Amir, Kufur Dan, Qaffin, Baaqa Asharqiya, Zaita, Bal'a, Kufur Al-libid, Beit Leed, Alkufuryat, Beita, Jamma'een, Aqraba, Qabalan, Kufur Thulth, Qarawat, Bani Hassaan, Kifil Haris, Azzawya, Bruqin, Kufur Addik, Deir Ista, Dier Balut, Bani Zaid AlGharbiya, Abowain, Sinjil, Al-itihad, Azzaytuna, Attayba, Na'leen, Beit Laqya, Bani Zaid Asharqiya, Al-Ouja, Beit I'nan, Birnabala, Biddo, Qatna, Anata, Assawahra Asharqiya, Beit Soureek, Alobaidiya, Alkhader, Za'tara, Taqua', Janata, Sureef, Kharas, Beit Ula, Sa'eer, Ash-yukh, Tarqumya, Ithna, Tafuh, Bani Nu'aim, Assamu', Nouba, Al-Karmel

From GDPT Base Committee, Municipality Categorisation, September 2015

Annex 4 Use of the Standard Land Reference Values of an entire municipality,

1. The Use of Standard Land Reference Values

Prior to calculating the Standard Land Rental Value of each quarter/block, the Standard Land Reference Values of an entire municipality, which has jurisdiction over the target quarter/block, are to be calculated from ledger book data. The Standard Land Reference Values are supplemental data referred in order to verify the level of a quarter/block's Standard Land Rental Value, and is calculated by conducting the following procedures. Valuers are instructed to determine the Standard Land Rental Value of each quarter/block by considering the balance of levels between the Standard Land Rental Value and the Standard Land Reference Values.

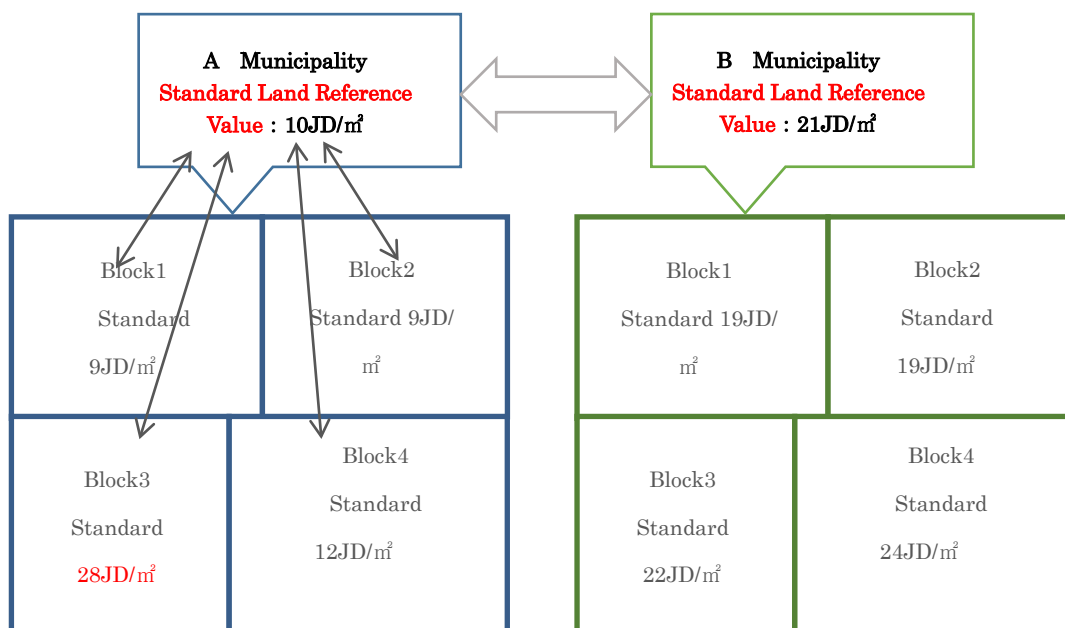
2. Purpose and Methodology of Calculating Standard Land Reference Values

(1) The purpose of the Standard Land Reference Values

In determining the Standard Land Rental Value of a quarter/block, the Standard Land Reference Values should be referred for the following purpose.

- A) To ensure the values of properties throughout Palestine are being developed and established in a balanced manner.
- B) To reduce the workload of calculating the Standard Land Market Value of each quarter/block by conducting the primary data processing.
- C) To maintain the certain level of quality in valuation process by systematically conducting the fundamental part of the valuation procedures.

Example:



Assume that each of Municipality A and Municipality B is composed of four blocks, and the above figure describes the Average Standard Land Reference Value of both municipalities and Standard Land Rental Value of each block. The Standard Land Reference Value (10JD/m²) of Municipality A could be referred when verifying the Standard Land Rental Value of each block within the municipality, as well as when comparing the difference between the two municipalities' Standard Land Reference Values.

Specifically, the Standard Land Reference Value of Municipality A (10 JD/m²) is balanced with the Standard Land Rental Values of Block 1 (9 JD/m²), Block 2 (9 JD/m²) and Block 4 (12 JD/m²), but not balanced with Block 3 (28 JD/m²). The large difference observed in Block 3's Standard Land Rental Value from other blocks indicates that the Block 3 has distinctive situation, unless the Standard Land Rental Value is miscalculated.

(2) Two Types of Standard Land Reference Values to be calculated

Two types of Standard Land Reference Values are to be calculated for each municipality, namely Average Standard Land Reference Value and Upper Standard Land Reference Value. Similar to the Standard Rental Value of a quarter/block, these reference values are virtual, not referring to an actual property within the municipality.

(3) Methodology of calculating Standard Land Reference Values

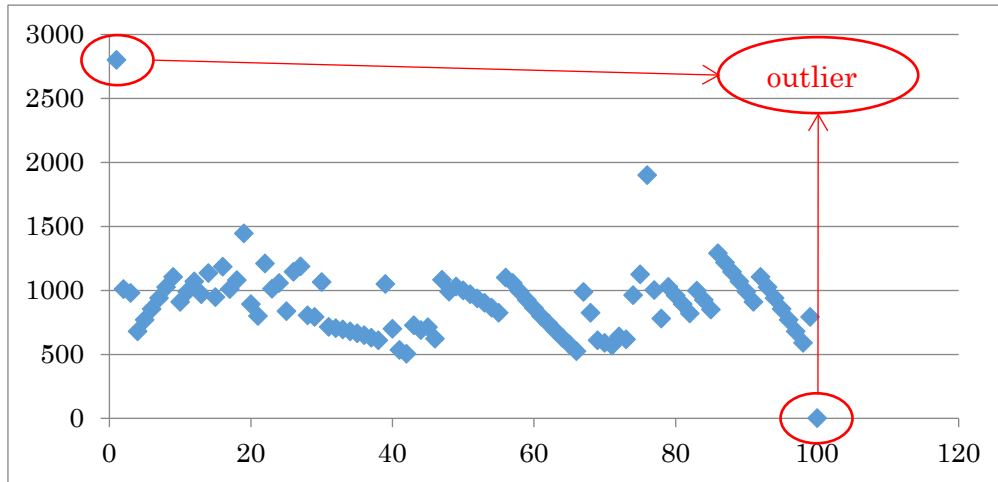
A) Average Standard Land Reference Value

In primary data process, latest data of each parcel is to be extracted.

Obtain the following data:

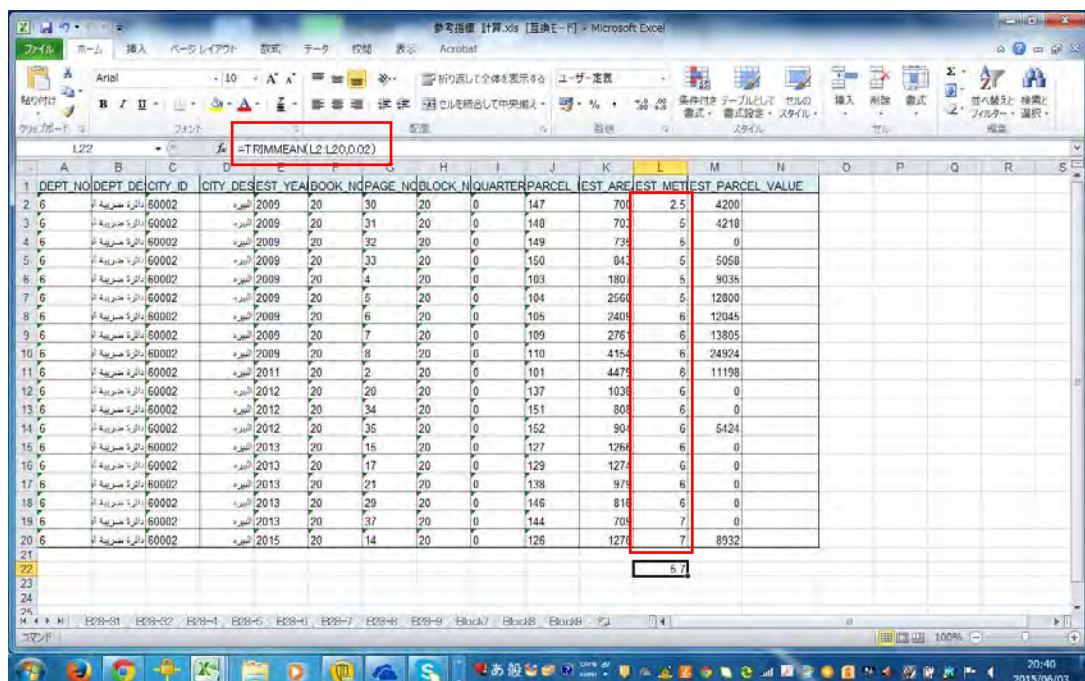
- (a) Quarter/block number
- (b) Land rental value per square meter
- (c) Usage category of each parcel (See Annex 4 for further explanation)

After obtaining the above data, extract (b) Rental value per square meter of residential usage and commercial usage to create two datasets. For each of the dataset, remove upper 1% and lower 1% of data, as those are generally considered to be outliers when conducting experimental analysis. Calculate the average to obtain Average Standard Land Reference Value.



In order to exclude outliers and calculate average by using Microsoft Excel for example, function TRIMMEAN is one way to do.

As shown in the image below, the average value after excluding outliers of EST_METER_PRICE (i.e. rental value per square meter) that is listed from Row 2 to Row 20 under Column L can be obtained by the function “TRIMMEAN (L2 : L20,0.02)”.



B) Upper Standard Land Reference Value

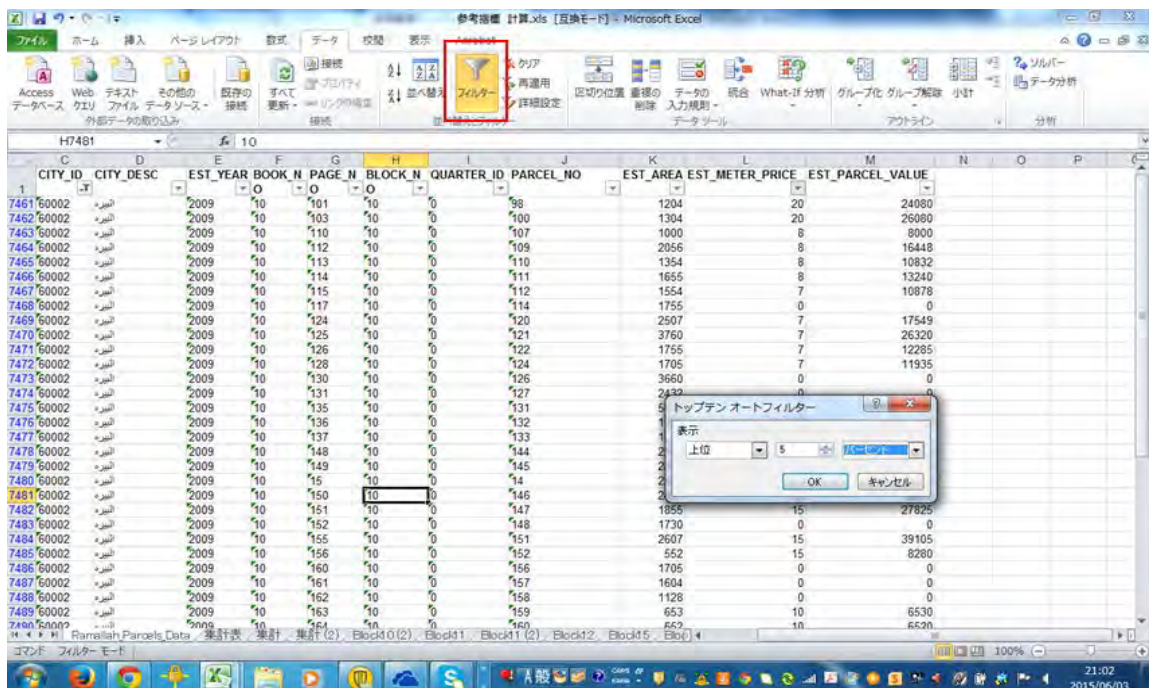
Use the same two datasets (residential and commercial usage) from which outliers have

been removed. Sort the data EST_METER_PRICE (i.e. rental value per square meter) in the order of highest to lowest, then extract upper 5 % from it. Calculate the average of the upper 5 % in order to obtain the Upper Standard Land Reference Value.

Sorting out upper 5% of a dataset can be easily done by using the filter function of Microsoft Excel.

Example :

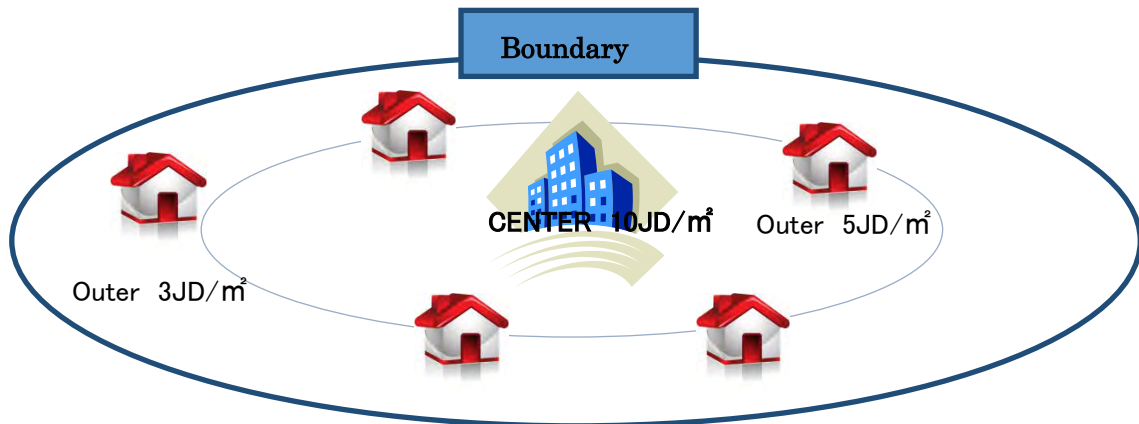
Click Filter→Click the pull down of column you want to filter→Select value filter→Click Top ten filter. Then select “upper” , “5” and “%” from the pull down.



The purpose of referring to the upper 5% of data is as follows:

- The values of properties are generally considered to be the highest at the center of the municipality, and go lower as they locate further from the center (See image below). When values of properties are being developed and established, it is believed that higher area of the mountain in the image (i.e. center of the municipality) reflects the characteristics of the value development. Hence, to understand the upper standard value is a rationale and essential step when verifying the balance of property values within a municipality. That being said, limiting the sample values to upper 5% helps to grasp the highest level of the mountain clearly.

- Comparing the upper standard values between municipalities, in addition to comparing the average standard values between municipalities, will enable the comparison to be multilateral and thorough.



3. Points to be taken into account when utilizing the Standard Land Reference Values

From the procedures above, Upper Standard Reference Value (the average of upper 5% rental values) and Average Standard Reference Value should have been obtained. Based on these values, the Standard Land Rental Value of a quarter/block are to be verified and determined.

The Standard Land Rental Value is an average of data “rental value per square meter” which is based on the ledger book data. When the sample number of the ledger book data is insufficient, or there are many outliers, the result of the calculation would not be precisely describing the average of a quarter/block. The Standard Land Reference Values are to be referred in the aim of drawing more accurate Standard Land Rental Value. By identifying the Standard Land Reference Values, valuers can have better view and understanding of the properties’ values of the target municipality. Furthermore, sharing the information of reference values between and among municipalities will help valuers to understand the balances between municipalities, hence derive better balanced valuation results.

Below are the characteristics of each municipality category and the example of how the Standard Land Reference Values are used in terms of verifying and determining Standard Land Rental Values of a block/quarter for both residential and commercial usages.

(1) Residential Usage

A) Municipality Category A

Municipalities classified as category A have large population and high standards of property value. Also, development and establishment of property values tend to be complicated. In this category, there exist luxury houses and the aspect of market transaction of residences could be significantly different. That is to say, there can be a large gap between the Upper Standard Land Reference Values and Average Standard Land Reference Values. If a target quarter/block locates within a high-class residential area, its Standard Rental Value needs to be determined in the way it has balance with both Upper Standard Land Reference Value of the municipality and Standard Rental Values of neighboring quarters/blocks. If a target quarter/block locates in standard residential area, its Standard Rental Value needs to be determined in the way it has balance with both the Average Standard Land Reference Value of the municipality and Standard Rental Values of neighboring quarters/blocks.

(Example of adjusting Standard Land Rental Value using reference values)

Block A is located in a high-class residential area, yet the average rental value per square meter from the ledger book data is 70JD/m² which is far below the Upper Standard Land Reference Value (100JD/m²) of the municipality. Since the neighboring Block B with similar characteristics has Standard Land Rental Value of 95JD/m², the Standard Land Rental Value of Block A was modified to 90JD/m².

B) Municipality Category B

This Category can also contain high-class residential area within the municipality. When the gap between the Upper and Average Standard Land Reference Values are large, high-class residence is highly likely to be there, in which case, follow the Example in Municipality Category A.

When gap between the Upper and Average Standard Land Reference Values is small, the Average Standard Land Reference Value should be heavily referred to.

(Example of verifying and determining Standard Land Rental Value using reference values)

Upper and Average Standard Land Reference Values are 55JD/m² and 50JD/m² respectively, hence no large gap has been observed. Each block's Standard Land Rental

Value in the municipality was verified based on the Standard Land Reference Value (50JD/m²).

C) Municipality Category C & D

Municipalities classified as Category C and D are generally considered as rural area. The gap between the Upper and Average Standard Land Reference Values tend to be small, and more focus should be paid on the Average.

It is generally the case that outskirts of such municipalities are agricultural land or open field, and the value of residential property is extremely low. In these area, one should less focus on the Average Standard Land Reference Value, but more on the balance between rental values of neighboring quarters/blocks.

(2) Commercial Usage

A) Category A

In this municipality category, there exists highly developed commercial area, and the characteristics of developing and establishing the property values can be significantly different from the ones in the municipality where markets are composed of small individual shops. In this high-class commercial area, office building complex, large-scale commercial and leisure facilities are expected to exist. That is to say, just like the Residential Usage above, there can be a large gap between the Upper Standard Land Reference Values and Average Standard Land Reference Values. Hence, when a target quarter/block locates in the high level commercial area, Upper Standard Land Reference Value should be closely referred in determining its Standard Land Rental Value. On the other hand, when a target quarter/block locates in standard commercial area, Average Standard Land Reference Value should be heavily counted in determining its Standard Land Rental Value. In case there is large difference between the two values, the Standard Land Rental Value of the quarter/block is to be determined in the way it has balance with the values of neighboring quarters/blocks.

B) Category B

This municipality can also contain high-class commercial area. When the gap between the Upper and Average Standard Land Reference Values are large, high-class commercial area is highly likely to be there, in which case, follow the Example in Municipality Category A.

When gap between the Upper and Average Standard Land Reference Values is small,

the Average Standard Land Reference Value should be heavily referred to.

C) Category C & D

Municipalities classified as Category C and D are generally considered as rural area, and are not expected to have high-class commercial area. The gap between the Upper and Average Standard Land Reference Values tend to be small, and more focus should be paid on the Average.

Annex 5 How to obtain flat area size

1. Identify flat area size from relevant documents

(1) Obtain relevant documents from municipality

When municipality which has jurisdiction over the target property possesses relevant documents such as building permit, and when it is possible to match the document and the target property, the flat area size described in the document is to be adopted.

The picture below is a sample of such documents.

بموجب قرار المجلس البلدي
بلدية دير ديوان

لجنة دير ديوان المحلية لتنظيم المدن
تصديق رخصة بناء رقم (1533) 37

رقم الملف: 17/181

اسم صاحب الرخصة: [Redacted]

اسم المهندس أو المجاز: [Redacted]

الرخصة اعطيت لـ: [Redacted]

موقع البناء: [Redacted]

تقطعة رقم: [Redacted]

حوض رقم: [Redacted]

منطقة التنظيم: [Redacted]

الاستعمال المرخص به: سكن

وصف الخرائط المرفقة بهذه الرخصة والتي تعتبر قسماً منها: مخططات المساحة الاصلية والمخططات الانشائية والمخططات الكهربائية

تاريخ المخطط الذي اجيز البناء بموجبه: 1997/4/17

الشروط الخاصة الملحقة بهذه الرخصة علاوة على الشروط الخاصة المطبوعة على ظهر هذه الرخصة: الالتزام بالمخططات المرشحة

علم الاعتراف على المبادئ

نوع البناء	الوحدة	الكتبة	المنة		المجموع	
			شكيل	أغ	شكيل	أغ
دور ارضي سكني	م	263	2	8	4	736
دور ادل سكني	م	263	2	8	4	736
مكرو بيت درج	م	15	2	8	-	42
رسم سقف صماء						3
رسم كسب + فتح دلف						2
						1574

تاريخ الاصدار: 1998/1/13

مجموع الرسوم: [Redacted]

رئيس لجنة دير ديوان المحلية لتنظيم المدن

ملاحظة: ينتهي العمل بهذه الرخصة بعد مرور سنة واحدة من تاريخ الاصدار

(2) Obtain relevant documents from property owner

When possible, contact the owner of the property prior to valuation, and obtain relevant documents such as architectural plan that has flat area size information.

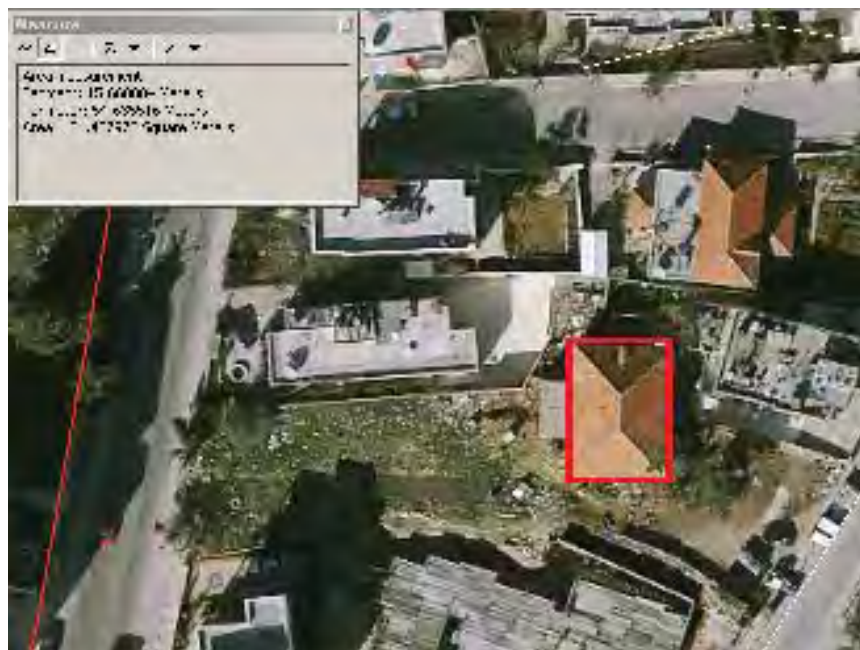
2. Determine flat area size from building's outer shape

The flat area size to be used for appraising a property should be based on the data obtained from actual measurement. The alternative methods are to be taken in case actual measurement is difficult to be conducted. Since the area size obtained by the alternative methods described below is not exactly accurate, the data should be used temporarily until when database of area size based on actual measurement is sufficiently prepared to be used. When calculating the value of a property, valutors are instructed to take into account the less preciseness of the area size data.

(1) When one flat composes one building

Obtain the flat area size from the outer shape of the target building using block maps or aerial photographs. When the target flat is composed of multiple floors, multiply the floor area size obtained with the number of floor to calculate the whole flat area size.

The picture below shows the approach of obtaining the flat area size of a building from its outer shape in an aerial photograph.



(2) When more than one flat composes one floor

Obtain the whole floor area size from aerial photograph, and divide it with the number of flats exists on the floor to estimate each flat's area size. This approach assumes that each flat on one floor has equal area size, though often times that is not the case. In the effort of reflecting the unevenness, the method of using laser measure below could be incorporated.

One should be reminded that these methods will include common space into account. One option that can be temporarily taken in order to remove the common space area is to subtract a certain percentage from the obtained whole area size before computing the value of a property. Another option that can be taken in the future is to calculate the average of common space area size from the database developed in the course of valuation activity.

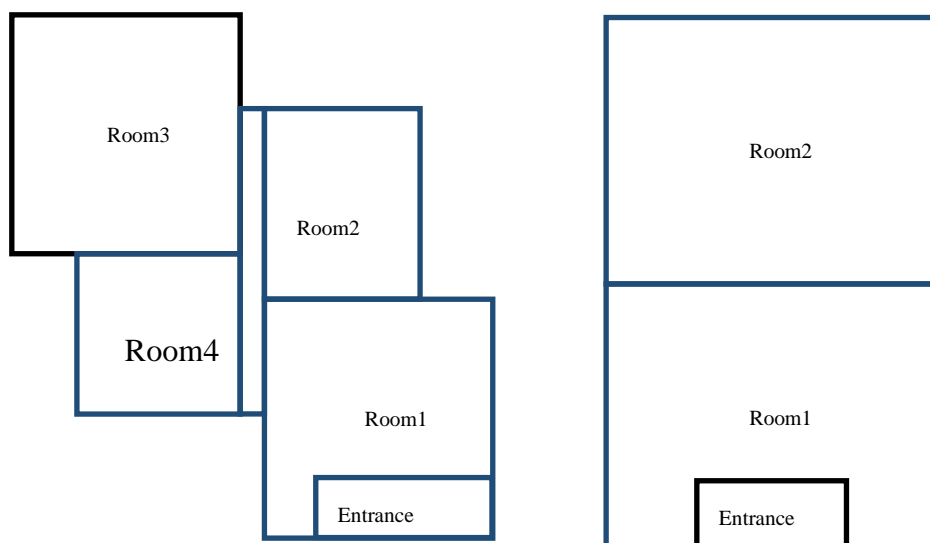
3. Obtain flat area size using laser measure

Two approaches can be taken in order to measure the flat area size by using a laser measure.

(1) Measuring from inside of the target building

When valuers are allowed to enter into the target building, flat area size is to be obtained by measuring room area sizes.

Figure below describes examples of complicated layout (left) and simple layout (right) of a flat. It should be noted that measuring the area size of a flat with complicated layout will be **time** consuming.



(2) Measuring from outside of the target building

When valuers are not allowed to enter into the target building, alternative way is to measure perimeter of the building, and determine the area size inside the perimeter as a floor area size. When more than one flat exists on one floor, divide the floor area size with the number of flat to obtain the each flat area size, in which case keep in mind about the unequal area size described in 2. (2) above.

4. Others

When an owner of a property expresses objection to the area size which was obtained by the alternative options mentioned above, an authorized person might instruct the owner to submit a proof document with the area size data from actual measurement which could be referred to modify the area size record. Adopting such a method is strongly encouraged since through this process the accumulation of area size database based on actual measurement will be expedited.

Annex 6: How to identify usage category of land and building?

1. Usage Category of Land

In this Valuation Standards, land is classified into four categories as below:

- a) Residential area: area designated for the habitation purpose where any form of housing units stand for people to live.
- b) Commercial area: area designated for the commercial purpose where shops business offices, and other related buildings stand.
- c) Industrial area: area designated for the manufacturing and related industrial purpose including areas where factories, warehouses, storages and others stand.
- d) Tourism area: area designated for the tourism purpose where tourists visit for make sightseeing historical or cultural entities or natural landscape or other substances)

The above usage category of land, parcel of which is assigned as the minimum and basic unit, is made in accordance with land use classification designated in Physical Master Plans prepared by the respective municipalities. In other word usage category of land denotes land use classification made by government bodies, being central or local government, in accordance with a certain methodology and procedure set officially for the administrative purpose (hereinafter referred to as ‘the administrative usage categories of land’).

The administrative usage category of land, which is assigned in this Valuation Standards, basically based on Article (23) of Organizational Use of Building and Organization Regulation for Local Authorities No. (5) of 2011 (hereinafter referred to as the building standard act). According to the building standard act, the administrative usage category of land is classified into (i) residential area including ten sub-categories, (ii) commercial area including five sub-categories and (iii) industrial area including five sub-categories (See the subsequent descriptions). Yet a few points should be noted herewith.

First, any area, which does not fall into the administrative usage category, shall be excluded from the category, and shall be provided as one of residential areas for this Valuation Standards.

Second, offices area and tourist facilities area, which are designated in either industrial

area or residential area in the standard building act, are grouped into one of commercial area.

Residential area:

Residential area in this Valuation Standards includes the following sub-categorized areas designated in the administrative use of category of the building standard act:

- a. High residential buildings area
- b. Villas area
- c. High residential “A”area
- d. Residential “A”area
- e. Residential “B”area
- f. Residential “C”area
- g. Residential “D”area
- h. Old city area
- i. Rural residential area
- j. Agricultural residential area

Commercial area:

Commercial area includes the following areas

- a. Local commercial area
- b. Longitudinal commercial area
- c. Commercial exhibition area
- d. Main commercial center area
- e. Sub-commercial center area
- f. Offices area (originally classified as ‘industrial area or residential’ in the act)

Industrial area:

Industrial area includes the following sub-categorized areas

- a. Industrial zone
- b. Light/craft industrial complexes
- c. Public institutions area

Tourism Area:

Tourism area includes the following sub-categorized area

- a. Tourist facilities area (originally classified as ‘industrial area or residential’ in the act)

2. Usage Category of Building

The usage category of building, flat of which is assigned as the minimum and basic unit, is made based on the result from field survey. In the case if a building with several stories consists of several flats, each flat is subject to identification of usage category. In other words an idea concerned with 'predominant pattern of use' shall not be used for valuation when you identify the usage category in a case where such building is used for various purposes. For instance, here is a six-story building. The ground-floor is used for supermarket, while the rest of floors is used for the residential purpose. In this case the ground-floor is classified into the category of commercial building, while the rest of floors into the category of residential building.

The usage category designated by this Valuation Standards is described as below.

- a) Residential building: building used for the habitation purpose. Residential building is further classified into (i) apartment building composed of several flats and (ii) non-apartment building such as independent housing units and premises composed of two flats connected either vertically or horizontally.
- b) Commercial building: building used for the commercial purpose including shops business offices, and other related buildings
- c) Industrial building: building used for the manufacturing and related industrial purpose including factory, warehouse, storage and related buildings.
- d) Tourism building: building used for the tourism purpose where tourists visit for make sightseeing historical or cultural entities or natural landscape or other substances

In many cases the usage category of building may be made based on the usage category of land on which the target building stands. However, this method cannot be universality effective. Accordingly, a residential building which is built upon the land designated as the commercial area by the Physical Master Plan is classified into the residential building, while the land is indentified as the commercial area.

For a flat of a building which is confirmed to be non-use at the date of valuation, the usage category of such flat shall be identified in the following matter:

- 1) Identify it by using the previous usage category, if any.

- 2) Use the usage category of the neighboring flat (or flat in the same floor)
- 3) Identify it as the residential building if it cannot be identified in accordance with Step 1 and Step 2 as above.

Examples of the usage categories of buildings are presented in the subsequent section.

Sample Photo-1 (*right*)
Commercial Building
(independent store)



Sample Photo-2 (*right*)
Commercial Building
(Business Office)



Sample Photo-3 (*right*)
Industrial Building
(Automobile
mechanical garage)






Sample Photo-4 (*right*)
Tourism Building
(Hotel)



Sample Photo-5 (*right*)
Residential Building-1
(Independent House)



<p>Sample Photo 6 (<i>right</i>) Residential Building-2 (Independent House)</p>	
<p>Sample Photo-7 (<i>right</i>) Residential Building (Apartments: 'Multi-apartment Building')</p>	
<p>Sample Photo-8 (<i>right</i>)</p> <ol style="list-style-type: none"> 1) Commercial building for the ground floor 2) Residential building for Flats in upper floors 	

Annex 7: Value Adjustment Matrix

1. Selection of value influencing factors

Value of certain property is defined by its own nature. In property valuation, factors to determine the value are selected, differentiated and numerified. Those numerical values are added up to determine the value of property.

Representative factors usually used for property valuation are listed below:

- 1) Factors related to natural and physical conditions
 - Sunlight, ventilation, humidity
 - Existence of buried cultural property
 - Existence of underground structure
 - Soil contamination

- 2) Factors related to social environment
 - Availability of water supply, gas, sewer, solid waste collection services
 - Communication infrastructure
 - Access to commercial establishments
 - Access to commercial center
 - Access to public institutions
 - Access to public transportation services
 - Proximity to environmental nuisances such as waste water processing plant
 - Availability of electricity
 - Regal and private restrictions and regulations
 - Customer flow
 - Proximity to roads, ports and airports
 - Planned usage and actual usage
 - Status of residents
 - Tenant mix
 - Situation and condition of neighboring properties and environment

- 3) Factors related to condition of property
 - Topography, ground condition, soil type
 - Frontage, depth, size, shape

4) Factors related to condition and structure of building:

Structural resistance to fire and earthquake

Observance to management rules

Building age

Use of hazardous construction material

Size, height, structure, material

Quality of maintenance and management

Design and functionality

Construction quality

Floor location

5) Factors related to connecting road

Relative height to the connecting road

Width and construction of the connecting road

Arrangement and continuity (thoroughfare or dead end)

2. **Value influencing factors in this Valuation Standards**

An attempt to select value influence factors were made for the standards, however, the factors are combined together and reduced for simplicity because of the current demand.

The factors selected for this Valuation Standards is underlined and these are the subjects for reconsideration in the future.

1) Land

a) Connecting road width

b) Continuity of connecting road

c) Pavement

d) Location (access to city center for relevant municipality, environment status,etc.)

e) Service (availability of water, sewer, gas and electricity)

f) Frontage

g) Shape

h) Area size

i) Topography

2) Building

- a) Building age
- b) Quality and condition
- c) Floor
- d) Services
- e) Area
- f) Elevator
- g) Parking lot

3. **Explanation for each value influence factor**

1) Land

a) Connecting road width

Adequate road width is essential for amenity for residential usage, convenient for customers for commercial usage, and logistical accessibility for industrial usage.

b) Continuity of road

Thoroughfare is a norm, however, a rare occasion of dead end reduces degree of convenience in all usages, especially for car use.

c) Pavement

Paved road is a norm, however, a rare occasion of unpaved road reduces degree of amenity in all usages when it may generate dust or become difficult to access in bad weather.

d) Location (access to city center, environment status, etc.)

This is valued case by case, considering status of proximity to the city center, public institutions, hospitals, natural environment and sociological status.

e) Service (availability of water, sewer, gas and electricity)

The value of land will be reduced when water, sewer, gas and/or electricity is/are not available.

f) Frontage

In commercial and tourism usage, more connected roads mean more accessibility and visibility leading to more attraction of customers and profitability. For residential usage, the value is also increased because of more sunlight and ventilation. For industrial usage,

multiple road connection will lead to ease of access for logistical purpose.

g) Shape

Unusually shaped land may cause difficulty and inefficient design of building and will lead to reduction of value.

h) Area size

Larger property tends to be valued less. Area of land beyond preferable size can cause total price to exceed easily marketable figure, which will restrict potential buyer and may result in long retaining period, thus devaluating the property.

i) Topography

Undesirable land such as sloped or bottom of the valley are less valued.

2) Building

a) Building age

Buildings lose value according to the lapse of time, because physical durability and functionality tend to decrease.

b) Quality and condition

As quality of construction, such as material, method and finishing increase, there is a tendency of increase in property value.

c) Floor

The floor location is valued highly on the ground floor where profitability is higher related to its convenience for customers and users. For commercial and tourism building, ground floor is valued higher because of convenience for the costumers, while in residencial building the upper floors are usually valued higher because of the amenity.

d) Services

Appraise value according to degree of maintenance and cleanliness of building. Usually highly valued if resident janitor is employed.

e) Area

Larger property tends to be valued less. Area of building beyond preferable size can cause

total price to exceed easily marketable figure, which will restrict potential buyer and may result in long retaining period, thus devaluating the property.

f) Elevator

Elevator contributes to increase in convenience, especially on multiple floored building.

g) Parking lot

Availability of parking lots increases convenience of car owners.

Value-influence factors and their weights are shown in Table 1.

Factors	Category 1				Category 2				Category 3				Category 4			
	Residential	Commercial	Industrial	Tourism	Residential	Commercial	Industrial	Tourism	Residential	Commercial	Industrial	Tourism	Residential	Commercial	Industrial	Tourism
Land	Options															
	Standard															
	Wide															
Road width	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Frontage	Narrow															
	Interior Lot															
	Corner Lot															
Location	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Shape of Parcel	Two Frontages															
	More than three Frontages															
	Standard															
Topography	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Building Age	Superior															
	Inferior															
	Standard															
Quality and Condition	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Floor Location	Not Standard															
	Standard															
	Not Standard															
Building	Options															
	Standard															
	Old															
Building Age	Extremely Old															
	Standard															
	Superior															
Quality and Condition	Inferior															
	Standard															
	Superior															
Floor Location	Inferior															
	Standard															
	Superior															
Services	0															
	1 or below															
	1															
Elevator	2															
	3 or above															
	Roof															
Elevator	Standard															
	Superior															
	Inferior															
Elevator	Available															
	Not Available															
	Standard															

Table 1: Value-influence factors and their weights

Annex 8: How to appraise Standard Rental Value of Target Quarter/Block

1. Preparing spreadsheets to calculate Standard Rental Value (For the use of MS-Excel)

Main procedures to prepare spreadsheets to calculate Standard Rental Value are presented by using Ms-Excel files to which relevant data are extracted from the P-TAX, that is the official digitized database developed and managed by GDPT.

(1) Extract relevant data from P-TAX

1) For Land:

List of data items for land

- EST_YEAR
- BLOCK_NO
- QUARTER_ID
- PARCEL_NO
- EST_AREA
- EST_METER_PRICE
- EST_PARCEL_VALUE

Sample Spreadsheet for Land -1:

EST_YEAR	BLOCK_N	QUARTER_ID	PARCEL_NO	EST_AREA	EST_METER_PRICE	EST_PARCEL_VALUE
1985	28	1	10	1323	1.5	1985
2009	28	1	10	1323	7	9261
2011	28	1	10	1323	7	9261
2012	28	1	10	1323	7	9261
1985	28	1	11	1685	1.5	2528

2) For Building:

List of data items for building

- EST_YEAR
- BLOCK_NO
- QUARTER_ID
- PARCEL_NO
- BLD_NO
- FLOOR

DRAFT FINAL

- FLAT_NO
- RENT_VALUE_USED
- FLT_SEQ

Sample Spreadsheet for Building-1:

EST_YEAR	BLOCK_N	QUARTER	PARCEL_	BLD_NO	FLOOR	FLAT_NO	RENT_VALUE_USED	FLT_SEQ
2014	7	0	60	0	-1	0	2750	216437
2014	7	0	2	0	0	0	500	216441
2014	7	0	20	4	0	0	2750	216420
2010	7	0	26	2	0	0	500	86593
2014	7	0	28	0	0	0	250	216423
2014	7	0	31	2	0	0	9000	216425
2010	7	0	40	3	0	0	525	86601

Note: For the case of building, data item on FLT_SEQ (flat sequence number) is required to identify flat itself in order to confirm whether or not flat could be identical in a case when a building is enlarged.

(2) Filter the data to obtain only latest data for each parcel

Results of extraction by using the Sample Spreadsheet for Land-1 is presented as an example below. All the data which are covered by blue-colored shadow shall be excluded from the processing of calculating Standard Rental Values.

Sample Spreadsheet for Land-2 after filtering data:

EST YEAR	BLOCK N	QUARTER	PARCEL NO	EST AREA	EST METER PRICE	EST PARCEL VALUE
1985	28	1	10	1323	1.5	1985
2009	28	1	10	1323	7	9261
2011	28	1	10	1323	7	9261
2012	28	1	10	1323	7	9261
1985	28	1	11	1685	1.5	2528

(3) Add columns of additional data items to the spreadsheets

1) For Land:

In regard to land, the following additional data to supplement the spreadsheet are required:

- Usage category of each parcel (See Annex 4 for further detail)

Each parcel is given a number by entering the specific number of each usage category of land as follows:

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- 1 for Residential Area
- 2 for Commercial Area
- 3 for Industrial Area
- 4 for Tourism Area

Sample Spreadsheet for Land-3 is given below.

EST_YEAR	BLOCK_NO	QUARTER_ID	PARCEL_NO	EST_AREA	EST_METER	EST_PARCEL	Classification
2012	7	0	66	8835	0.8	7068	2
2012	7	0	68	3614	0.8	2891	2
2012	7	0	312	808	2	1616	1
2012	7	0	319	800	2	1600	2
2012	7	0	320	801	2	1602	3
2012	7	0	321	800	2	1600	2

In the Sample Spreadsheet above, Parcel No. 66 has 'classification' (far right) as 2, which indicates the parcel is designated as 'commercial area.'

2) For Building:

In regard to building, the following additional data to supplement the spreadsheet are required:

- Usage category of each flat
- Floor area size
- Flat area size
- Number of flats on a floor (FLAT COUNT in P-TAX)

Each flat is allocated a number according to its actual usage. The number of usage category is as follows:

- 1 for Apartment
- 2 for Non-Apartment
- 3 for Commercial
- 4 for Industrial
- 5 for Tourism

Sample Spreadsheet for Building-2 is presented below:

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EST_YEAR	BLOCK_N	QUARTER	PARCEL	BLD_NO	FLOOR	FLAT_NO	RENT_VALUE_USED	FLT_SEQ	usage classificatio	floor area size	flat area size	FLAT_COUNT
2014	7	0	60	0	-1	0	2750	216437	1	470	470	1
2014	7	0	2	0	0	0	500	216441	1	320	320	1
2014	7	0	20	4	0	0	2750	216420	1	420	420	1
2010	7	0	26	2	0	0	500	86593	1	270	270	1
2014	7	0	28	0	0	0	250	216423	1	160	160	1
2014	7	0	31	2	0	0	9000	216425	1	110	110	1
2010	7	0	40	3	0	0	525	86601	1	240	240	1

In the Sample Spreadsheet for Building-2, one can find all the usage category of flat is given the number 1 which indicates the apartment. At the same time, floor area size is equal to flat area size in all cases, which means that each floor consists of one flat (flat count is 1).

(4) Prepare spreadsheets for each usage category

The above both spreadsheets for land and building respectively shall be re-arranged through re-grouping (filtering) by each usage category in order to prepare new spreadsheets classified by each usage category.

Concerning the spreadsheet for building, a new column on 'value/m²' shall be additionally prepared in order to measure rental value of each flat per square meter which provides the basis for the calculation of Standard Building Value by each usage category. A sample spreadsheet is given below.

Sample Spreadsheet for Building-3

EST_YEAR	BLOCK_N	QUARTER	PARCEL	BLD_NO	FLOOR	FLAT_NO	RENT_VALUE_USED	FLT_SEQ	usage classificatio	floor area size	flat area size	FLAT_COUNT	VALUE/M2
2014	7	0	60	0	-1	0	2750	216437	1	470	470	1	5.9
2014	7	0	2	0	0	0	500	216441	1	320	320	1	1.6
2014	7	0	20	4	0	0	2750	216420	1	420	420	1	6.5
2010	7	0	26	2	0	0	500	86593	1	270	270	1	1.9
2014	7	0	28	0	0	0	250	216423	1	160	160	1	1.6
2014	7	0	31	2	0	0	9000	216425	1	110	110	1	81.8
2010	7	0	40	3	0	0	525	86601	1	240	240	1	2.2

As the above spreadsheet for building shows, the rental value of each flat per square meter is calculated by dividing 'RENT VALUE USED' by flat area size. For the case of Parcel No. 60 Building No. 0, the rental value of the flat is calculated as: 2,750 / 470 ≈ 5.9 JD/m².

(5) Calculate and Verify the Standard Rental Values

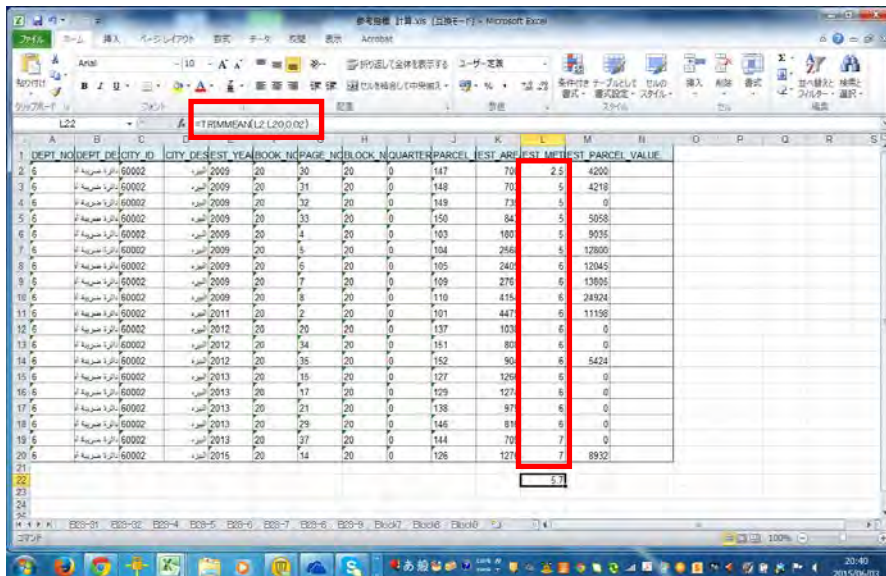
Based on the above set spreadsheets, Standard Rental Value of quarter/block by usage category shall be calculated. The method to calculate Standard Rental Value presented herewith is by and large the same one to calculate Standard Land Reference Values

(Readers are advised to see also ‘Explanations to this Valuation Standards: II-4-A’ and Annex 7).

A sample spreadsheet is given below in order to show a method on how to exclude outliers from data for calculate an average by using the function of ‘TRIMMEAN’ of MS-Excel.

- Column used: Column L
- Rows in which target data for analysis are stored: L2 to L 20
- Function “TRIMMEAN” =TRIMMEAN (L2 : L20,0.02)

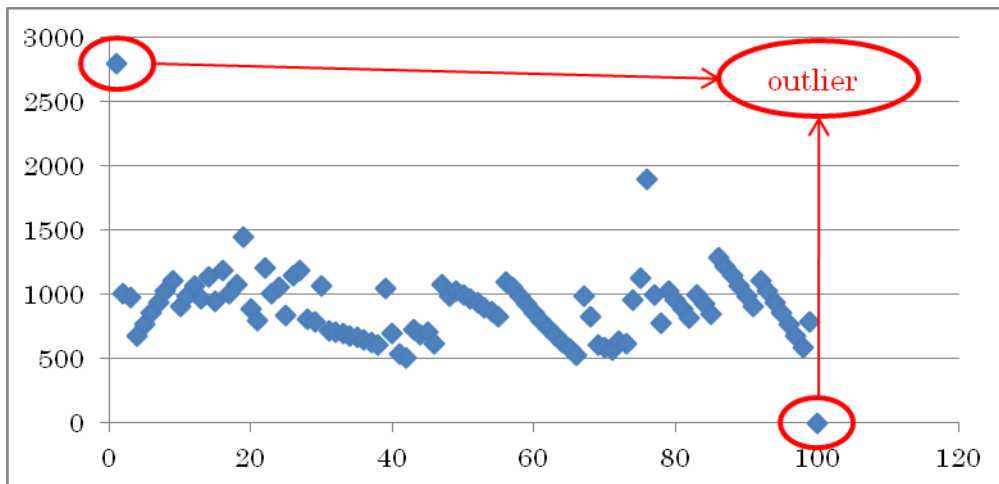
Remark: 0.02 is set by summing up 0.01 x 2 (1 for 1 % of upper outlier and 1 for 1 % for lower outlier)



2. Calculating the average of quarter/block by property and by usage category

Based on property valuation ledger by each municipality, the average of quarter/block by property (land and building) and by usage category shall be calculated. For this, a simple method, its effectiveness of which has been professionally verified in various disciplines, is employed in order to calculate the average by removing outliers of both the upper 1 % and the lower 1 % from extracted data.

A few examples of outliers are indicated in the graph as below.



The procedures of calculating and determining Standard Rental Values described above are based on the assumption that rental data are available from P-TAX. As for land, market ratio needs to be obtained and used in order to calculate “standard land market value”. For further explanation of market ratio, refer to II-3 and III-2-D.

3. Procedures to be taken for municipalities where property valuation initially takes place or newly valuated municipalities for property taxation

In municipalities where the property tax will be newly introduced, it is considered difficult to obtain existing rental value data of properties since no ledger books have been compiled. Hence, it is necessary to newly obtain and compile the transaction data as well as rental sample data and determine the Standard Rental Values based on them. The first step is to obtain from the municipality the Table of Ownership and the block map to identify the target property itself and its location. When there is no Table of Ownership or block map exist for the target area, request the municipality to prepare them.

The procedures below relies on the assumption that Table of Ownerships and block maps exist and are available.

- (1) Procedures in the municipality where the collection of sample market transaction and rental data is relatively easy
 - 1) In each quarter/block, collect 10 to 30 cases of sample transaction data for land and rental data for building, by usage category.

- 2) For land, by calculating the average of collected sample market transaction data, Standard Land Market Value will be worked out. At this juncture, verify this figure by comparing with Standard Land Market Value of neighboring municipalities where the ledger books are compiled. In case when the validity of the calculation is considered low, renounce this approach basing on sample market transaction data.

An example of questionable figure calculated based on sample transaction data are described below.

Already Valuated : α Municipality

Category B

Average market value as standard : 10JD/m²

(image photo)



Newly Valuated : β Municipality

Category D

Average of transaction data : 70JD/m²

(image photo)



This example indicates that the average transaction value of less populated/urbanized β Municipality is far higher than the standard market value of α municipality where more populated/urbanized. In such a case the sample transaction data collected are considered invalid and as the next action, either investigate the contexts of the sample transactions which skew the figure (e.g. parties involved and situation, etc.) or to reject such data, is desirable.

- 3) As for building, the Standard Building Rental Value of a quarter/block is determined based on the rental data of the area. Collect the rental data of the target quarter/block, calculate the average and determine the Standard Building Rental Value (JD/m²). To verify the collected rental data and the calculated Standard Building Rental Value, follow the approach taken for land i.e. make comparison with neighboring municipalities from which Standard

Building Rental Value, that is calculated based on ledger book (or P-TAX) data, is available.

(2) In case the number of sample data is insufficient

In case the number of samples (market transaction for land, rental value for building) that are obtainable from a quarter/block is less than 10, collect the data from neighboring quarter/blocks (roughly 2 to 10 quarter/blocks) and calculate the averages in order to obtain standard values.

(3) In case collection of sample data is impossible

Adopt the Standard Building Rental Value and Standard Land Market Value from most similar quarter/block of the municipality in same category. In judging similarity, take into account the level of urbanization/population increase based on publicized statistical data etc.

(4) Notes on collecting the sample rental data

In order to achieve reliable calculation results for Standard Rental Value, the following points should be taken into account.

- It is desirable to use latest samples; prioritize the rental samples with their rental contract executed approximately within 5 years from the time of valuation.
- Avoid using samples with excessive area sizes. Excessive here means more than 1,000 m² for a flat and 3,000 m² for a parcel.
- Avoid using samples within which special interests or stakes can be inferred (e.g. rent deal between relatives) hence the sample value is not market-based.

MINISTRY OF FINANCE
GENERAL DIRECTORATE OF PROPERTY TAX

Handbook for Valuers

- Field Guide to Property Valuation Standards in Palestine -

March 2016
J-PVP

Handbook for Valuers

Field Guide to Property Valuation Standards in Palestine

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INTRODUCTION

This Handbook is prepared for valuers to use for their field works for appraising properties. Valuers are strongly advised to carefully read and sufficiently understand both 'Valuation Standards' and 'Technical Manual for Valuation Standards' and should be ready to refer to these documents whenever necessity arises in using this Handbook.

1 GENERAL PROVISIONS

1-1 Code of Conducts for Valuers

- Beware that property tax is one of the essential sources of revenue for government, especially for local government.
- Beware that appraisal of property values is justified based on the Valuation Standards, since property tax is the tax to be imposed on based on appraised values of land and building
- Beware that property valuation should be accountable and reproducible to the public in order to ensure fundamental conditions required to reveal basic principles of fairness, simplicity, and neutrality are met all the time, as the Valuation Standards states significant importance of such principles and requirements..

1-2 Target of Valuation

- Both land and building, that compose property, are subject to appraisal of value under this Valuation Standards.
- In appraising the value, this Valuation Standards designates **PARCEL** as the basic unit of valuation for land.
- Also this Valuation Standards designates **FLAT** as the basic unit of valuation for building.

1-3 Bases of Property Valuation

Base of valuation for land is market value, while base of valuation for building is rental value.

1-4 Main Actors for Valuation

General Directorate of Property Tax of Ministry of Finance is mandated to have overall responsibility for valuation. Under GDPT's powers in the execution of property valuation, relevant departments specialized in analytical works shall be responsible for identifying municipality category (see Step 1 in Figure 1) and calculating standard value for quarter/block (see Step 2), while valuers who are assigned in each branch office are in charge of appraising value of individual property (see Step 3).

2

WORKFLOW OF PROPERTY VALUATION

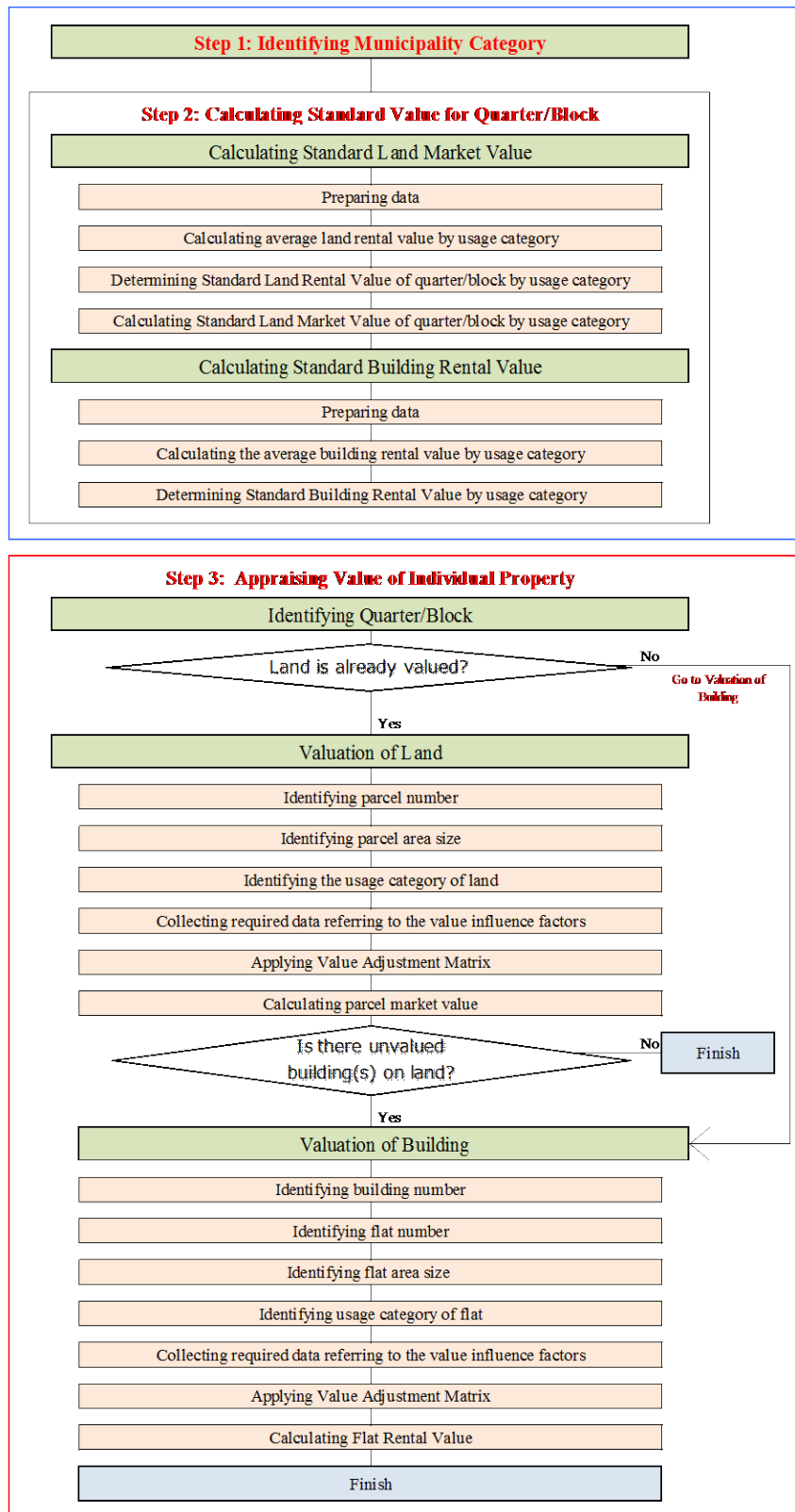


Figure 1 Workflow of Property Valuation in Palestine

2-1 Main Steps of Valuation

As shown in Figure-1, property valuation in Palestine is to be conducted through the three main steps as below:

- | |
|--|
| <p>Step 1: Identifying Municipality Category</p> <p>Step 2: Calculating Standard Value of Quarter/Block</p> <p>Step 3: Appraising Value of Individual Property</p> |
|--|

2-2 Step 1: Identifying Municipality's Category

Identify and confirm the category of municipality which the target municipality belongs to. The category of municipality shall be based upon the categorization set by the GDPT.

2-3 Step 2: Calculating Standard Value of Quarter/Block

2-3-1 Calculating Standard Land Market Value

Standard Land Market Value is determined through the following procedure.

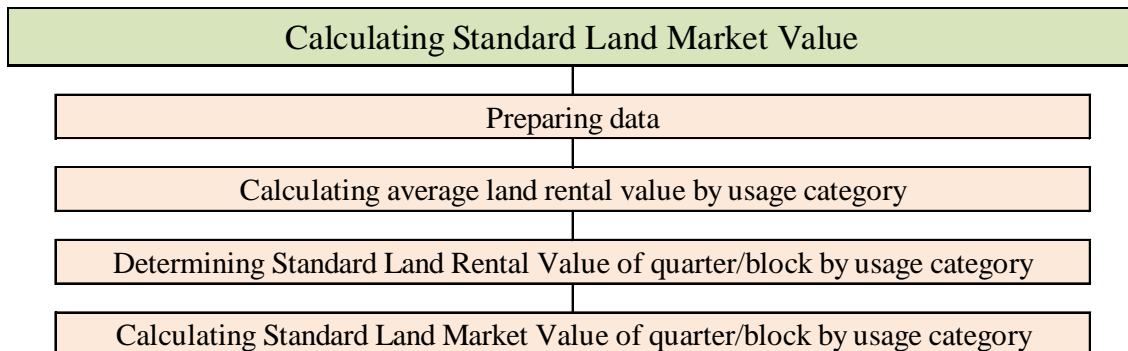


Figure 2 Workflow for calculating Standard Land Market Value

2-3-1 (1) Preparing data

Obtain and prepare the following data.

- 1) Quarter/Block Map (from GDPT or municipality)
- 2) Data from Ledger book

- (a) Estimated year
- (b) Block number
- (c) Quarter number
- (d) Parcel number
- (e) Area size
- (f) Rental value per square meter
- (g) Rental value of parcel

3) Land usage category

Reclassify the usages on Physical Master Plan into four (4) usage categories as below: namely, A) residential area: B) commercial area: C) industrial area: and D) tourism area.

- A) Residential area: area designated for the habitation purpose where any form of housing units stand for people to live.

Residential area in this Valuation Standards includes the following sub-categorized areas designated in the administrative use of category of the Building Standard Act¹:

- a. High residential buildings area
- b. Villas area
- c. High residential “A” area
- d. Residential “A” area
- e. Residential “B” area
- f. Residential “C” area
- g. Residential “D” area
- h. Old city area
- i. Rural residential area
- j. Agricultural residential area

- B) Commercial area: area designated for the commercial

¹ Article (23) of Organizational Use of Building and Organization Regulation for Local Authorities No. (5) of 2011

purpose where shops business offices, and other related buildings stand.

- a. Local commercial area
- b. Longitudinal commercial area
- c. Commercial exhibition area
- d. Main commercial center area
- e. Sub-commercial center area
- f. Offices area (originally classified as ‘industrial area or residential’ in the act)

C) Industrial area: area designated for the manufacturing and related industrial purpose including areas where factories, warehouses, storages and others stand.

- a. Industrial zone
- b. Light/craft industrial complexes
- c. Public institutions area

D) Tourism area: area designated for the tourism purpose where tourists visit for make sightseeing historical or cultural entities or natural landscape or other substances)

- a. Tourist facilities area (originally classified as ‘industrial area or residential’ in the act)

2-3-1 (2) Calculating average land rental value by usage category

Filter the dataset listed above to the latest estimated year of parcel. Classify it into either one of the four (4) usage categories. After excluding outliers, calculate the average above the rental value per square meter [2)-(f)].

When parcels of more than one usage category exist in a quarter/block, calculate the standard rental value for each category.

In case when sample number in each quarter/block is less than 30, determine the standard rental value by carefully taking following aspects into account.

- Take into account the balance of standard rental values with adjacent quarters/blocks.
- Conduct balance check with adjacent quarters/blocks. Typically, areas with

similar characteristics will have similar values.

2-3-1 (3) Determining Standard Land Rental Value of quarter/block by usage category

Refer to the Land Reference Standard Values as needed in order to assess the relevance of the average value obtained in 2-3-1 (2), and determine the Standard Land Rental Value (A) of quarter/block by usage category.

$$\text{Standard Land Rental Value} = (A)$$

2-3-1 (4) Calculating Standard Land Market Value of quarter/block by usage category

Multiply the Standard Land Rental Value (A) with the market ratio in order to determine the Standard Land Market Value (B) of quarter/block by usage category. This particular task is performed only once at the first time when this Valuation Standards is applied.

$$\text{Standard Land Market Value} = (B)$$

2-3-2 Calculating Standard Building Rental Value

Standard Building Rental Value is determined through the following procedure.

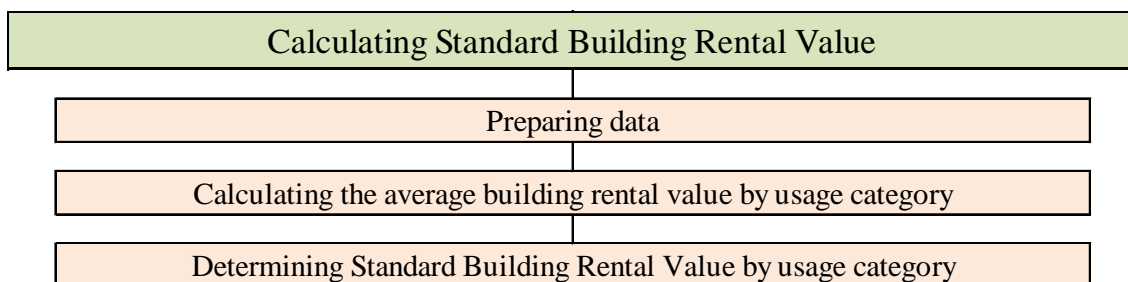


Figure 3 Workflow for calculating Standard Building Rental Value

2-3-2 (1) Preparing data

Obtain and prepare the following data.

- 1) Quarter/ Block Map (from GDPT or municipalities)
- 2) Data from ledger book

- (a) Estimated year
- (b) Block number
- (c) Quarter number
- (d) Parcel number
- (e) Building number
- (f) Floor number
- (g) Flat number
- (h) Rental value per square meter
- (i) Flat sequence number

3) Obtain the following data from the field survey.

- (j) Flat usage classification (usage category of building)

In the case if a building with several stories consists of several flats, each flat is subject to identification of usage category. In other words an idea concerned with ‘predominant pattern of use’ shall not be used for valuation when you identify the usage category in a case where such building is used for various purposes. For instance, here is a six-story building. The ground-floor is used for supermarket, while the rest of floors is used for the residential purpose. In this case the ground-floor is classified into the category of commercial building, while the rest of floors into the category of residential building.

The usage category designated by this Valuation Standards is described as below.

- A) Residential building: building used for the habitation purpose. Residential building is further classified into (i) apartment building composed of several flats and (ii) non-apartment building such as independent housing units and premises composed of two flats connected either vertically or horizontally.
- B) Commercial building: building used for the commercial purpose including shops business offices, and other

- related buildings
- C) Industrial building: building used for the manufacturing and related industrial purpose including factory, warehouse, storage and related buildings.
- D) Tourism building: building used for the tourism purpose where tourists visit for make sightseeing historical or cultural entities or natural landscape or other substances.

In many cases the usage category of building may be made based on the usage category of land on which the target building stands. However, this method cannot be universality effective. Accordingly, a residential building which is built upon the land designated as the commercial area by the Physical Master Plan is classified into the residential building, while the land is indentified as the commercial area.

For a flat of a building which is confirmed to be non-use at the date of valuation, the usage category of such flat shall be identified in the following matter:

- i) Identify it by using the previous usage category, if any.
- ii) Use the usage category of the neighboring flat (or flat in the same floor)
- iii) Identify it as the residential building if it cannot be identified in accordance with Step 1 and Step 2 as above.

4) Obtain the following data from building permit and field survey etc.

- (k) Floor area size
- (l) Flat area size

When municipality which has jurisdiction over the target property possesses relevant documents such as building permit, and when it is possible to match the document and the target property, the flat area size described in the document is to be adopted.

When possible, contact the owner of the property prior to valuation, and obtain relevant documents such as architectural plan that has flat area size

information.

- i) When one flat composes one building, obtain the flat area size from the outer shape of the target building using block maps or aerial photographs.
- ii) When more than one flat composes one floor, obtain the whole floor area size from aerial photograph, and divide it with the number of flats exists on the floor to estimate each flat's area size.
- iii) Obtain flat area size using laser measure. When valuator are allowed to enter into the target building, flat area size is to be obtained by measuring room area sizes. When valuator are not allowed to enter into the target building, alternative way is to measure perimeter of the building, and determine the area size inside the perimeter as a floor area size.

(m) Flat count per floor

For some data which is considered difficult to obtain solely by GDPT (i.e. (k), (l) and (m) in above list), GDPT should work with other public organizations such as municipality, etc.

2-3-2 (2) Calculating the average building rental value by usage category

Filter the dataset above to the latest estimated year per flat. Divide it into four groups according to the actual usage category (Residential, Commercial, Industrial and Tourism). After excluding the outliers, calculate the above average of the rental value per square meter [2)-(h)].

In case when sample number in each quarter/block is less than 30, determine the standard rental value by carefully taking following aspects into account.

- Take into account the balance of standard rental values with adjacent quarters/blocks.
- Conduct balance check with adjacent quarters/blocks. Typically, areas with similar characteristics will have similar values.

2-3-2 (3) Determining Standard Building Rental Value by usage category

Verify, as needed, the average value obtained in III-3-B by referring to the statistical data, and determine the Standard Building Rental Value of quarter/block by usage category. (C)

$$\text{Standard Building Rental Value} = (C)$$

While the standard rental value for building is desired to be worked out by utilizing the accumulated data extracted from evidential documents such as rental contracts through statistical procedure, at the introduction stage of this Valuation Standard the data stored in P-TAX system shall be utilized.

2-4 Step 3: Appraising Value of Individual Property

2-4-1 Identifying the location of target properties in Quarter/Block

Identify the location of target property on the block map.

2-4-2 Valuation of Land

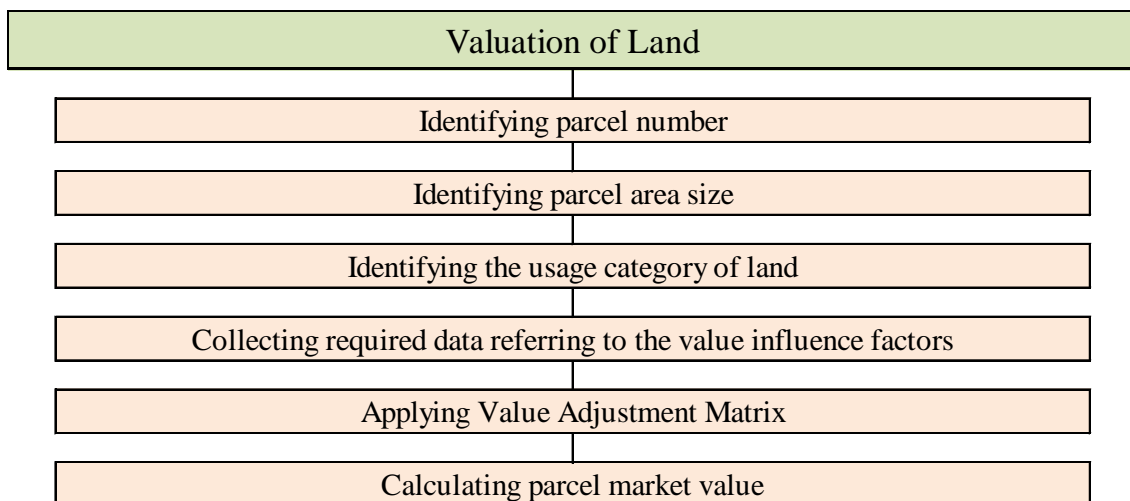


Figure 4 Workflow for Valuation of Land

2-4-2 (1) Identifying parcel number

Identify the parcel number of the target land using block maps, Physical Master Plan and other existing sources.

In case if block maps are unavailable, ask municipality to prepare them.

In principle, a parcel number should be identified by collating the P-TAX data and the block map (all data of GDPT's ledger books have been digitized in P-TAX as database and in P-TAX, data for registered properties are obtained from "Table of Rights (Tabo)" updated by PLA while data for unregistered properties are obtained from "Table of Ownership" updated by municipalities).

When there are parcels that cannot collate, either P-TAX or block map data may have error and this error should be identified and corrected.

2-4-2 (2) Identifying parcel area size

Identify the parcel area size by referring to existing data.

In principle, the land area registered in P-TAX is regarded as the parcel area size for valuation (Note: data officially recorded in GDPT's ledger books have been digitized in P-TAX as database. In P-TAX, data for registered properties are obtained from "Table of Rights (Tabo)" updated by PLA, while data for unregistered properties are obtained from "Table of Ownership" updated by municipalities). When the property is a building, the area size of the land on which the building stands registered in P-TAX is used for valuation.

Besides, parcel area size can be obtained from such documents as building permit or detailed plan which the property's municipality holds with data related to land area size.

When the parcel area size information is unavailable, the land area size will be measured and obtained from the latest block map.

Several methods can be used to measure the land area from the block map, such as measuring an analog drawing or geographic information system (GIS). When the land area size measured from the map differs significantly from the neighboring parcel area sizes registered in Tabo and Table of Ownership, the parcel in question shall be visited and the frontage and depth of the land should be measured to confirm the reliability of data (See 'Technical Manual for Valuation Standards' in detail).

Decimal point of land area size data (number) shall be treated as has always been.

Parcel area size (m²) (D)

2-4-2 (3) Identifying the usage category of land

Identify the usage category of land from either one of Residential, Commercial, Industrial and Tourism.

- A) Residential area: area designated for the habitation purpose where any form of housing units stand for people to live.
- B) Commercial area: area designated for the commercial purpose where shops business offices, and other related buildings stand.
- C) Industrial area: area designated for the manufacturing and related industrial purpose including areas where factories, warehouses, storages and others stand.
- D) Tourism area: area designated for the tourism purpose where tourists visit for make sightseeing historical or cultural entities or natural landscape or other substances)

2-4-2 (4) Collecting required data referring to the value influence factors

Conduct survey to collect required data referring to the value influence factors.

1) Road Width	
a) Standard	: More than 6 meter width and less than 8 meter width
b) Wide	: More than 8 meter width
c) Narrow	: Less than 6 meter width
Note: Road width include sidewalk for pedestrians.	
2) Frontage	
a) Interior Lot	: One frontage
b) Corner Lot	: Corner Lot
c) Two Frontage	: Two frontages
d) More than three Frontage	: More than three frontages
3) Location	

a) Standard	: Easy access/Availability of electric and water supplies/far from nuisances including the one causing noises
b) Superior	: Easy access/Proximity to the center of a municipality/Availability of electric power supply, water supply and sewerage service/ far from nuisances including the one causing noises
b) Inferior	: Hard access/Far from the center of a municipality/Close to nuisances including the one causing noises
4) Shape of Parcel	
a) Standard	: Four sided
b) Not Standard	: Three or more than five sided
5) Topography	
a) Standard	: Flat
b) Not Standard	: Sloped

2-4-2 (5) Applying Value Adjustment Matrix

Based on the result of survey, determine the adjustment weight of each value influence factor by referring to the relevant Value Adjustment Matrix. Multiply all the adjustment weights to compute the Net Adjustment Weight.

Net Adjustment Weight (E)

2-4-2 (6) Calculating parcel market value

Multiply the Standard Land Market Value (B) with the parcel area size (D) and with the Net Adjustment Weight (E) to obtain the parcel market value (F).

(B)(D)*(E) = Parcel Market Value (F)*

2-4-3 Valuation of Building

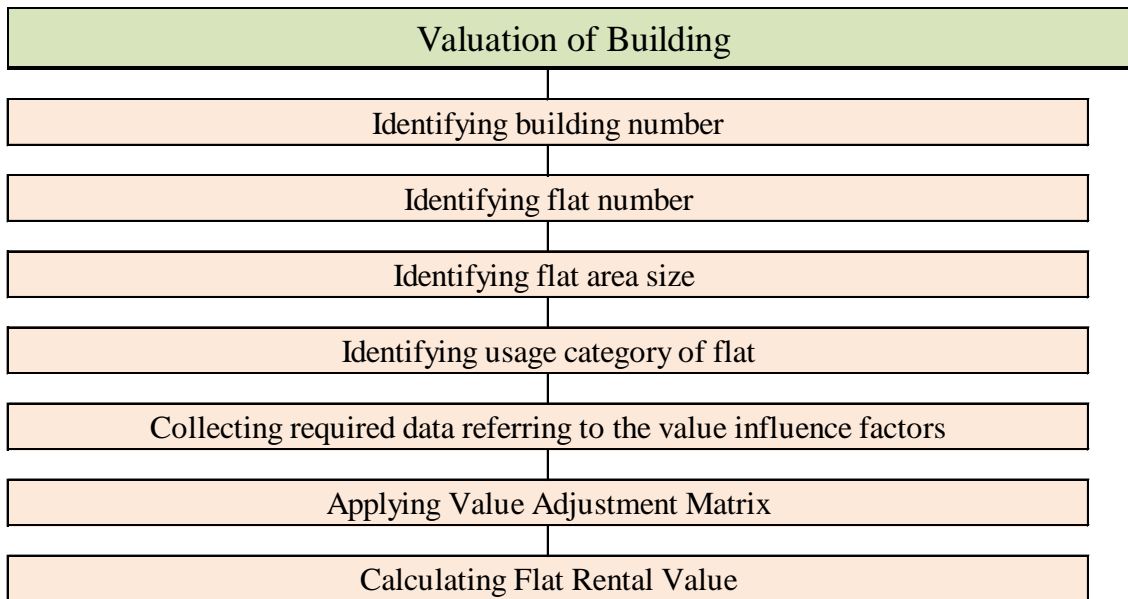


Figure 5 Workflow for Valuation of Building

2-4-3 (1) Identifying building number

Identify the building number according to existing data on ledger book. If no data exists, allocate a number to each building within a parcel. When more than one building stands on a parcel, number them in order of the year of completion.

1) Building No. in Roll

The building No. in Roll indicates a number assigned to each building when more than one building exists on a parcel.

< Setting method >

The building number is determined and enrolled based on the building number provided in P-TAX. When there is only one building on a parcel, its Building No. in Roll is zero (0).

< Note >

When the appearance of a building is renewed due to extension and/or remodel, the initial Building No. in Roll stays the same. However, when the building is reconstructed, a new Building No. in Roll is assigned and entered.

When the actual building number has been assigned to a property, this number must also be noted down. The important point to keep in mind is that the actual building number differs from the Building No. in Roll. The following picture is an example of the actual building number.

2) Floor No.

When the property is a building with multiple floors, the Floor No. indicates which floor of the building the property locates.

<Setting method>

The Floor No. is determined and enrolled based on floor-related information provided by P-TAX. Basically, “0” is assigned to the floor facing a main road, “1” is assigned to the floor one level up of the floor “0”, and the number continues to go up. Likewise, “-1” is assigned to the floor one level down of floor “0”, and the number continues to go down.

2-4-3 (2) Identifying flat number

Identify the flat number according to existing data on ledger book. If no data exists, allocate certain number to the property.

2-4-3 (3) Identifying flat area size

- Identify the area size of the flat using the existing documents or obtaining from field visit.
- The flat area size indicates the total floor area of each residence. The unit used in this manual is square meter (m²).
- The methods to identify the flat area size vary in accordance with the type of the property (non-apartment building or apartment building) and the documents available.

Flat area size = (G)

2-4-3 (4) Identifying usage category of flat

Identify the usage category of the flat from either one of Residential, Commercial, Industrial and Tourism, according to the actual use. In principle, the usage of the flat

will be identified based on the actual usage at the time of valuation.

2-4-3 (5) Collecting required data referring to the value influence factors

Conduct survey to collect required data referring to the value influence factors

1) Building Age	
a) Standard	: 0 to 25 years after the completion of construction
b) Old	: 26 to 50 years after the completion of construction
c) Extremely Old	: Older than 51 years after the completion of construction
2) Quality and Conditions	
a) Standard	: subject to addition by GDPT in the future
b) Superior	: subject to addition by GDPT in the future
c) Inferior	: subject to addition by GDPT in the future
3) Floor Location	
a) 0 and roof	: Ground-floor and Penthouse
b) -1 or below	: Basement and below
c) 1	: 1 st floor
d) 2	: 2 st floor
e) 3 or above	: 3 st floor and the above
c) Roof	: The top floor and tiled roof
4) Services	
a) Standard	: subject to addition by GDPT in the future
b) Superior	: subject to addition by GDPT in the future
c) Inferior	: subject to addition by GDPT in the future
5) Elevator	
a) Available	: Building equipped with Elevator
b) Not Available	: Building without Elevator

2-3-4 (6) Applying Value Adjustment Matrix

Based on the result of survey in 2-4-3 (5), determine the adjustment weight of each value influence factor by referring to the relevant Value Adjustment Matrix. Multiply all the adjustment weight to compute the Net Adjustment Weight (H).

$$\text{Net Adjustment Weight} = (H)$$

2-4-3 (7) Calculating flat rental value

Multiply the Standard Building Rental Value (C) with flat area size (G) and with the Net Adjustment Weight (H) to obtain the Flat Rental Value (I).

$$(C)*(G)*(H) = \textit{Flat Rental Value (I)}$$

2016

Trainer's Guide

Valuation Standards Technical
Training

General Directorate of Property Tax
Ministry of Finance and Planning

Project for Improvement of Local Finance System in
Palestine

(JICA Palestine Valuation Project)

Supported by
Japan International Cooperation Agency (JICA)



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1. INTRODUCTION

Since the establishment of the Palestinian Authority (PA), the local governments of Palestine have been given clear roles on public service deliveries. However, in reality, their functions have remained fairly limited and underdeveloped due to several factors. One of the main issues that the municipalities of Palestine have been facing is the scarcity of source revenue. This has been causing most of the municipalities' service provisions to fall far short of the expected levels.

Under the current legal and institutional circumstances, property tax is the most reliable revenue source for municipalities. However, not all municipalities in the West Bank are presently subject to property taxation. In order to maintain fairness and equity, the General Directorate of Property Tax (hereinafter referred to as GDPT) which is under the Ministry of Finance and Planning (hereinafter referred to as MOFP) is exerting its utmost efforts to achieve a full coverage of taxation in all the municipalities of the West Bank.

Based on the above, in 2012 the MOF has requested Japan International Cooperation Agency (JICA) for technical assistance to strengthen the operational capacity of GDPT with a clear developmental objective of improving revenue for local governments in Palestine. Accordingly, a project has been formulated to work under the title of "The Project for Improvement of Local Finance System in Palestine" (hereinafter referred to as JICA-Palestine Valuation Project or JPVP).

The following table shows the outline of the J-PVP that was agreed upon between PA and JICA.

Period	October 2012 – September 2016 <4 years > (Actual implementation period: February 2013 – September 2016)
Overall Goal	The revenue from property tax is improved in Palestine
Project Purpose	Operations on property valuation and property tax collection have been improved, particularly at the GDPT branch office where pilot activities have been implemented under this Project ("modified pilot GDPT branch office")
Expected Outputs	<ol style="list-style-type: none"> 1. The Training, Development and Media Unit (TDMU) at GDPT, develops its capacity to formulate operation plans (i.e. Master Plan and Annual Plan, including Capacity Development Plan). 2. The Valuation Standards Working Group strengthens its capacity to develop and operationalize the property valuation standards. 3. The operational issues on property valuation and property tax collection at pilot GDPT branch offices are identified and improved.

The GDPT of MOFP is aiming to achieve the following objectives which are under the scope of the GDPT's three-year strategic plan (2012-2014): 1) Enhancing the area in which property tax is levied; 2) Revising the act on property tax; 3) Drafting and implementing new valuation

standards; 4) upgrading the ability of tax collection techniques; and 5) Introducing a comprehensive work system by using information and communication technologies (ICT).

2. ABOUT THE TRAINER'S GUIDE

The Trainer's Guide is designed to help the trainer to become familiar with the training framework and its contents, and to master the teaching aids provided. General instruction for the trainers include:

- Please read the entire guide thoroughly before conducting the training.
- Plan and prepare visual aids for the training.
- Arrange all required stationery/supplies for practice sessions.
- Use local resources for materials production.
- Activate each participant in group work.
- Give enough time for practice.
- Spend time for review during the training course.

3. COURSE OUTLINE

3-1) PURPOSE AND OBJECTIVES

PURPOSE

To equip relevant GDPT staff with basic knowledge, attitudes and skills required for the operationalization of the new valuation standards.

OBJECTIVES

1. To acquire basic knowledge on the new property tax valuation standards, i.e., its purpose, principles and methodology.
2. To equip GDPT staff with practical skills to appraise properties through the application of the new valuation standards.
3. To provide GDPT staff with a forum to exchange views on the new valuation standards for further operationalization of the new valuation standards through possible modification or improvement of the valuation standards and its operation manual.
4. To enhance the technical capacity of GDPT staff for (i) using P-TAX system for valuation based on the new valuation standards; and (ii) using GIS and other techniques for property valuation.
5. To develop human resources within GDPT capable of continually sustaining training programs in valuation standards for its staff.

3-2) ORGANIZERS

JPVP Project experts, Assistant Expert for Training, GIS Engineer, Assistant Expert for data collection and management, Assistant Expert for Property Tax Valuation Standards, TDMMU, Senior Project Administrator, Director of Valuation Department, Director of Branch Office Affairs Department and Director of IT Department. Their Responsibilities are:

1. Support the valuation standards technical training program.

2. Prepare action plan for training program in VS.
3. Design the training program which includes the specification of trainees, preparation of training materials and logistical arrangements.
4. Prepare handouts: trainer's guide, power point presentations, manuals, etc...
5. Conduct the training program.
6. Collect all the training data, evaluate the training and prepare the final completion report.
7. Obtain feedbacks to the draft VS and its operational manual and handbook.
8. Support the training follow up stage.

3-3) COURSE STRUCTURE (See training program in Annex 1, pages 8-11)

Modules	Topic	Content	Duration
Module 1	Principles of Property Valuation	<ul style="list-style-type: none"> - Property Appraisal - Real Estate Appraisal Career - Specifications and qualifications of valuers (Ethics and rules for valuation) - Conditions necessary to change (tolerance for change) 	1hr.
Module 2	Property Tax Valuation Standards: Purpose, Principles, and Methodology	<ul style="list-style-type: none"> - Purposes of formulating the new valuation standards - Valuation principles and methodologies - Municipality classification - Property value estimation (formula) - Standard values - Indicators: Area size and Value influence factors (Value Adjustment Matrix) 	1 hr.
Module 3	Use of P-TAX system for Valuation	<ul style="list-style-type: none"> - Structure of PTAX for valuation - Valuation records 	4.0 hrs.
Module 4	Geo-PTAX	<ul style="list-style-type: none"> - Structure of Geo-PTAX and how to use it for valuation 	8.0 hrs.
Module 5	Desk Trial Application	<ul style="list-style-type: none"> - Identify target areas for desk trials - Calculation of standard points 	4.0 hrs.
	Field Trial Application	<ul style="list-style-type: none"> - Identify target areas for field trials - Examination of individual targets by using the valuation records - Estimation of appraised values for each target 	4.5 hrs.

However, the module hours can be flexible based on the discussion with the trainers (to be

discussed at review meetings). Opening, Closing, Expectation, Evaluation and Pre-Post Test sessions shall be added to the training sessions.

It is worth mentioning that in order to design and conduct an effective training, sequential order of valuation operations should be referred to and maintained in delivering the training sessions. Annex 2 (page 12) shows a schematic operation flow chart for valuation and collection based on which the training program should be designed.

3-4) LEARNING OBJECTIVES FOR INDIVIDUAL MODULES

Module	Topic	Objective
Module 1	Principles of Property Valuation	By the end of the session trainees will be able to: <ol style="list-style-type: none"> 1. Be familiar with the main contents of the module. 2. Explain the main contents of the module to his/her colleagues or relevant staff. 3. Teach/Train his/her colleagues or relevant staff on the main contents of the module.
Module 2	Property Tax Valuation Standards: Purpose, Principles, and Methodology	By the end of the session trainees will be able to: <ol style="list-style-type: none"> 1. Be familiar with the main contents of the module. 2. Explain the main contents of the module to his/her colleagues and relevant staff. 3. Teach/Train his/her colleagues or relevant staff on the main contents of the module.
Module 3	Use of P-TAX system for Valuation	By the end of the session trainees will be able to: <ol style="list-style-type: none"> 1. Understand interfaces and their related data for valuation. 2. Make necessary data entry for valuation. 3. Obtain field reports to proceed with estimation of appraised value. 4. Teach/Train other staff on how to operate P-TAX for NSV.
Module 4	Geo-PTAX	By the end of the session trainees will be able to: <ol style="list-style-type: none"> 1. Be familiar with usefulness of GIS for property valuation. 2. Identify and obtain necessary selected data for property from GIS.

		<ol style="list-style-type: none"> 3. Make use of GIS data for property valuation. 4. Teach/Train other staff on how to use GIS for property valuation.
Module 5	Desk Trial Application	<p>By the end of the session trainees will be able to:</p> <ol style="list-style-type: none"> 1. Be familiar with the estimation procedure of standard values. 2. Explain the method of standard value estimation. 3. Teach/Train others in the method of standard value estimation.
	Field Trial Application	<p>By the end of the session trainees will be able to:</p> <ol style="list-style-type: none"> 1. Be familiar with valuation procedures of Valuation Standards 2. Operate field work in the process to apply valuation standards to lands and buildings 3. Teach/Train others in all the process of valuation.

3-5) TRAINERS (Trainers List: See Annex 3, page 13)

1) Trainer's Criteria

- A trainer should have willingness to support "Valuation Standards Technical Training".
- A trainer should be willing to transfer his/her knowledge and skills to a trainee.
- A trainer should have good communication skills and collaboration with organizers, other trainers and trainees.
- A trainer should have a good attitude as a role model.
- A trainer should be willing to work in a team.
- A trainer should be capable of developing training materials.

2) Selection of Trainers:

- Trainers will be head of valuation department who is working at GDPT, and specialists in related topics.
- A trainer should be selected through the discussion between the General Directorate of Property Tax and the Project.

3-6) TRAINEE'S CRITERIA (Trainees List: See Annex 4, pages 14-17)

GDPT Head Office directors, branch office directors and deputies working at GDPT, valuers, assistant valuers, data entry, IT, and accountants (total of 70).

3-7) TRAINING SITE

Training site should be well equipped with;

1. Training room is big enough for lectures and practices for the number of trainees and

trainers (e.g. Training centers or Hotel halls).

2. The training site should be carefully selected to accommodate participants in accordance to the training module. For example, a maximum of 20 participants per group should be taken into consideration when executing practical modules, whereas lecture oriented modules necessitate larger spaces.
3. Teaching aids/materials: Desktop/Laptop Computer, LCD, Projection screen, IEC tools, and other necessary materials for practices (these materials will be provided by the organizers).

4. MODULE PLAN AND TEACHING METHODS (See Annex 5, pages 18-19)

Teaching methods include:

- Lectures
- Group Work
- Exercises (Desk and Field Trial Application)
- Discussions (Question and Answer)

5. COURSE EVALUATION

5-1) OBJECTIVES OF COURSE EVALUATION

- To determine the effectiveness of the program design.
- To evaluate the knowledge and skills of the trainees.
- To improve the "Valuation Standards Program" through evaluation.

5-2) FOUR LEVELS OF EVALUATION

DURING PROGRAM EVALUATION

- 1) **Reaction Evaluation:** This level measures how the trainees reacted to the training course (the trainers, the topics, the material, the presentations, and the venue). This level-one evaluation is achieved by using a "Reaction Evaluation Sheet" to be filled out by trainees (Annex 6, pages 20-22).
 - 2) **Learning Evaluation:** This is an application of 'before and after' assessment method to measure what the trainees have learned in the training course. The extent to which participants change attitudes, increase knowledge, and/or increase skill. This level-two evaluation is achieved by using a "Pretest Posttest" to be filled out by trainees (Annex 7, pages 23-37). The pretest is conducted on the first day of the training, and the posttest is conducted on the last day to assess the knowledge.
- *Both Reaction and Learning Evaluation will be analyzed by the GDPT supported by the project and reviewed with all trainers after the training.*

POST PROGRAM EVALUATION

- 3) **Behavior/Performance Evaluation:** To find out how the training affected the performance of trainees and the extent to which change in behavior occurred. Specifically, this looks at how trainees apply the information to their real job. This is a longer-term activity that should take place weeks or months after the initial training. This level-three evaluation is achieved through observation (a checklist can be used as a tool for evaluation by the supervisory team), performance benchmarks (before

and after), or evidence.

4) Results/Impact Evaluation: At this level, the final results of the training can be analyzed. This includes outcomes that the organization (GDPT/MOFP) has determined to be good for the local finance system, good for the valuers, and good for the community. This level-four evaluation is achieved through the significant positive change that has occurred at the level of the organization or the target group (e.g. increase in the property tax revenues?).

- *Both Behavior and Results Evaluation will be analyzed by the GDPT and reviewed with all trainers.*

6. CERTIFICATE OF PARTICIPATION

Certificates of participation are presented to all those who have participated in the trainings.

7. REFERENCES

- 1) Valuation Standards (JPVP)
- 2) PTAX
- 3) Geo-PTAX

8. PRESENTATION MATERIAL (See Annex 8, page 38-135)

9. ANNEXES

Annex 1: Valuation Standards Technical Training Schedule

Annex 2: Schematic Operation flow Chart for Valuation and Collection

Annex 3: List of Trainers

Annex 4: List of Trainees

Annex 5: Module plans and Teaching Methods

Annex 6: Reaction Evaluation Sheet

Annex 7: Pretest - posttest

Annex 8: Power point presentations

ANNEX 1

Valuation Standards Training Program

Training Day Program for Module 1 and 2

MC: Mr. Mohammad Yousef, Director of Valuation Department

Time	Contents	Responsible
9:00-9:30 (30 min)	Registration	
9:30-10:00 (30 min)	Opening Remarks -Speeches -Introduction to the training course	Mr. Mahmoud Nofal/GDPT DG (Speech) Ms. Yuko Santo /JICA Mr. Masanobu Ninomiya /JPVP Mr. Mohammad Yousef, Director of Valuation Department
10:00-11:00 (60 min)	Module 1: Principles of Property Valuation	Mr. Mahmoud Nofal
11:00-11:30 (30 min)	Break Pre-Test for valuers only	Ms. Fadia ALKHATIB/JPVP
11:30-12:30 (60min)	Module 2: Property Tax Valuation Standards: Purpose, Principles, and Methodology	Mr. Mahmoud Nofal Ms. Shatha Kharraz/Assistant Expert for VS/JPVP
12:30-13:30	Geo-PTAX Efficiency Presentation	Mr. Ghassan Sajdiyyeh Mr. Hisham Al Basha Mr. Hazem Shalan
13:30-14:30	Open Floor for Discussion Reaction Evaluation	Ms. Fadia ALKHATIB/JPVP
14:30	Lunch	

Training Day Program for Module 3 (PTAX)

Time	Contents	Responsible
8:30-9:00 (30 min)	Registration	
9:00-10:00 (60 min)	Introduction on the New Valuation Standards	Mr. Mohammad Yousef, Director of Valuation Department
10:00-12:00 (120 min)	Module 3: PTAX System for the use of the New Valuation Standards	Mr. Ibrahim Abu Raida, Experts Turnkey Solutions Mr. Ayman AL Hawamdeh, GDPT Mr. Ahmad Abu Awad, JPVP
12:00-12:30 (30 min)	Break	
12:30-14:30 (120 min)	Module 3: Practical exercise on the application of the PTAX System by the participants	Mr. Ibrahim Abu Raida, Experts Turnkey Solutions Mr. Ayman AL Hawamdeh, GDPT Mr. Ahmad Abu Awad, JPVP
	Reaction Evaluation	Ms. Fadia ALKHATIB/JPVP
14:30	Lunch	

Training Day Program for Module 4 (Geo-PTAX)

Time	Contents	Responsible
8:30-9:00 (30 min)	Registration	
9:00-11:00 (120 min)	Module 4 (Session 1): The structure of Geo-PTAX	Mr. Jamal Numan/MOLG Mr. Hani Draidji/JPVP Project
11:00-11:30 (30 min)	Break	
11:30-13:30 (120 min)	Module 4 (Session 2): How to use Geo-PTAX for valuation	Mr. Jamal Numan/MOLG Mr. Hani Draidji/JPVP Project
	Reaction Evaluation	Ms. Fadia ALKHATIB/JPVP
13:30	Lunch	

Training Day Program for Module 5-1 (Desk Trial Application)

Time	Contents	Responsible
8:30-9:00 (30 min)	Registration	
9:30-11:30 (120 min)	Introduction Module 5-1 (Session 1): - Presentation on how to calculate the standard values - Exercise for Land	Mr. Masanobu Ninomiya Ms. Shatha Kharraz/JPVP Project
11:30-12:00 (30 min)	Break	
12:00-14:00 (120 min)	Module 5-1 (Session 2): - Exercise for buildings	Ms. Shatha Kharraz/JPVP Project
14:00-14:30 (30 min)	- Wrap up and floor discussion	Mr. Masanobu Ninomiya Ms. Shatha Kharraz/JPVP Project
	- Reaction Evaluation	Ms. Fadia ALKHATIB/JPVP
14:30	Lunch	

Training Day Program for Module 5-2 (Field Trial Application)

Time	Contents	Responsible
8:30-09:00 (30 min)	Registration	
9:00-09:10 (10 min)	Introduction Session	Mr. Mohammed Yousef Mr. Masanobu Ninomiya
09:10-09:45 (35 min)	Session 1: Presentation Presentation on how to make field trial application, use of VIF for appraisal A part of exercise to be conducted in the room	Mr. Mohammed Yousuf assisted by Ms. Shatha Omriyeh
09:45-10:00 (15 min)	Move from GDPT to target properties in Beitunia Municipality, Block #1	
10:00-12:15 (135 min)	Session 2: Field exercise Exercise for Buildings and Lands	Mr. Nagasawa assisted by Mr. Hazem (Translation: Ms. Sugeta and Ms. Fadia)
12:15-12:30	Move from Beitunia to GDPT	
12:30-13:30 (60 min)	Session 3: Exercise in Data Entry	Mr. Ayed assisted by Mr. Ahmad and Ms. Shatha Kharraz
13:30-14:00 (30 min)	Session 4: Presentation and Discussion on results of Appraised Value	Mr. Mohammed Yousuf assisted by Ms. Shatha Omriyeh
14:00-14:30 (30 min)	Session 5: Post-test and Reaction Evaluation Session	Ms. Fadia ALKHATIB,JPVP
14:30	Lunch	

ANNEX 3

List of Trainers vs. Training Modules

Trainer	Module	Topic	Content
Mr. Mahmoud Nofal /GDPT	Module 1	Principles of Property Valuation	<ol style="list-style-type: none"> 1. Property Appraisal 2. Real Estate Appraisal Career 3. Specifications and qualifications of valuers (Ethics and rules for valuers) 4. Conditions necessary to change
Mr. Mahmoud Nofal /GDPT (1-2) Ms. Shatha Kharraz/JPVP (3-6)	Module 2	Property Tax Valuation Standards: Purpose, Principles, and Methodology	<ol style="list-style-type: none"> 1. Purposes of formulating the new valuation standards 2. Valuation principles and methodologies 3. Municipality classification 4. Property value estimation (formula) 5. Standard values 6. Indicators: Area size and Value influence factors
Mr. Ibrahim Abu Raida / Experts Turnkey Solutions Mr. Ayman Hawamdeh/GDPT Mr. Ahmad Abu Awad/JPVP	Module 3	Use of P-TAX system for Valuation	<ol style="list-style-type: none"> 1. Structure of PTAX for valuation 2. Valuation records
Mr. Jamal Numan/MOLG Mr. Hani Draidji/JPVP	Module 4	Geo-PTAX	<ol style="list-style-type: none"> 1. Structure of Geo-PTAX and how to use it for valuation
Ms. Shatha Kharraz/JPVP	Module 5-1	Desk trial application	<ol style="list-style-type: none"> 1. Identify target areas for desk trials 2. Calculation of standard values
Mr. Mohammad Yousef/GDPT Shatha Omriyeh/GDPT Jiro Nagasawa/JPVP	Module 5-2	Field trial application	<ol style="list-style-type: none"> 1. Identify target areas for field trials 2. Examination of individual targets by using Valuation Records 3. Estimation of appraised values for each target

ANNEX 4

List of Trainees vs. Training Modules

#	Trainees		Module 1	Module 2	Module 3	Module 4	Module 5		
	Trainee's Name	Trainee's Position	Principles of Property Valuation	Property Tax Valuation Standards: Purpose, Principles and Methodology	Use of P-TAX system for Valuation	Geo-PTAX	Trial Application	Desk	Field
1	Mohammad Yousef	Director of Valuation Dept	•	•					
2	Ayman Al-Hawamdeh	Director Head of IT Dept	•	•					
3	Fatima Abu-Qbeita	Director of Accounts Dept	•	•					
4	Sameer Jum'a Al-Toukhi	Director of Office Affairs Follow-Up Dept	•	•					
5	Radi Ghassan Qadri	Head of Business License Division	•	•					
6	Nasser Al-Khatib	Director of Inspection and Verification Dept	•	•					
7	Hassem Ali Yousef Abu Salem	Head of Collection Division	•	•	•				
8	Burhan Kamel Mashaqi	Director of Jenin Branch Office	•	•					
9	Jamal Hussein Dharaghme	Director of Toubas Branch Office	•	•					
10	May Jameel Ismael	Director of Tulkarem Branch Office	•	•					
11	Samer Subhi Manna'	Director of Qalqilya Branch Office	•	•					
12	Moayyad Ibrahim Duweikat	Director of Nablus Branch Office	•	•					
13	Allan "Mohammad Ameen" Allan	Director of Salfeet Branch Office	•	•					
14	Hisham Abdel-Rahman Turk	Director of Al-Ram Branch Office	•	•			•		
15	Ali Mohammad Al-Badaha	Director of Ramallah Branch Office	•	•					
16	Jawad Mohammad Nasser	Director of Jericho Branch Office	•	•					
17	Bassam Mohammad Abu-Dayyah	Director of Abu Dis Branch Office, IT	•	•			•		

#	Trainees		Module 1	Module 2	Module 3	Module 4	Module 5	
	Trainee's Name	Trainee's Position	Principles of Property Valuation	Property Tax Valuation Standards: Purpose, Principles and Methodology	Use of P-TAX system for Valuation	Geo-PTAX	Trial Application	Desk
18	Amer Ahmad Al-Khatib	Director of Bethlehem Branch Office, IT	•	•			•	
19	Khaled Ahmad Hmeidat	Director of Hebron Branch Office	•	•				
20	Na'eem Numan Dahdoulan	Director of Dura Branch Office	•	•				
21	Yousef Mohammad Al-Hawamdeh	Director of Yatta Branch Office	•	•				
22	Abdel-Haleem Kamel Saleh	Deputy Director Qalqilya	•	•				
23	Husein Mahmoud Shtayyeh	Deputy Director Salfeet	•	•	•		•	
24	Nabil Khalil Al-Muqeiti	Deputy Director Jericho, Accounting	•	•	•		•	
25	George Elias Shahwan	Deputy Director Bethlehem, Accounting	•	•				
26	Bassam Na'eem Al-Za'areer	Deputy Director Hebron, IT			•			
27	Adel Ali Milhem	Valuation Jenin	•	•		•		•
28	Eid Mohammad Abdel Razeq	Valuation Jenin	•	•		•		•
29	Rajeh Adel Nazzal	Valuation Jenin	•	•	•	•		•
30	Ibrahim Mahmoud Abu-Hussein	Valuation Tulkarem	•	•	•	•	•	•
31	Ahmad Ali Khadraj	Valuation Qalqilya	•	•	•	•	•	•
32	Abdel-Fattah Mahmoud Nofal	Valuation Nablus	•	•	•	•	•	•
33	Wael Hasan Judeh	Valuation Nablus	•	•		•		•
34	Suleiman Abdullah Duweikat	Valuation Nablus	•	•	•	•		•
35	Mazen Abdel Rahman Hindiyyeh	Valuation Nablus	•	•	•	•		•
36	Firas Husni Halaweh	Valuation Nablus	•	•	•	•		•
37	Rami Sukkar	Valuation Nablus	•	•	•	•		•

#	Trainees		Module 1	Module 2	Module 3	Module 4	Module 5		
	Trainee's Name	Trainee's Position	Principles of Property Valuation	Property Tax Valuation Standards: Purpose, Principles and Methodology	Use of P-TAX system for Valuation	Geo-PTAX	Trial Application	Desk	Field
38	Ghassan Mohammad Sajdiyeh	Valuation Ramallah	•	•	•	•			•
39	Nael Sami Al-Shareef	Valuation Ramallah	•	•	•	•	•	•	•
40	Mohammad Jihad Al-Goul	Valuation Ramallah	•	•	•	•			•
41	Hazem Daoud Shalan	Valuation Ramallah	•	•	•	•	•	•	•
42	Sally Abu Shareef	Valuation Ramallah			•				
43	Yousef Hasan Othman	Valuation Ramallah	•	•	•	•			
44	Shatha Sameer Omriyeh	Valuation Ramallah	•	•	•	•	•	•	•
45	Yaser Bajes Ziadeh	Valuation Ramallah			•	•			
46	Anan Ziyad Matar	Valuation Abu Dees	•	•	•	•			•
47	Husam George Al-Qassis	Valuation Bethlehem			•	•	•	•	•
48	Murad Sa'di Ed'ees	Valuation Hebron	•	•	•	•	•	•	•
49	Jamal Salem Farshat	Valuation Hebron	•	•	•	•			•
50	Khaled Yousef Farajallah	Valuation Hebron	•	•	•	•	•	•	•
51	Iyad Ahmad Al-Shamleh	Valuation Hebron	•	•	•	•			•
52	Ismael Suleiman Al-Za'arir	Valuation Yatta	•	•	•	•	•	•	•
53	Bassem Amer Abu Samra	Accounting Jenin			•		•		
54	Samah Zuheir Jibat	Accounting Tulkarem	•	•					
55	Hilmi Salem Hilal	Accounting Tulkarem	•	•					
56	Samer Abdel-Mine'm Ahmad	Accounting Ramallah	•	•					
57	Bassam Mahmoud Amara	Accounting Ramallah	•	•					
58	Younes Abed Shawamrah	Accounting Yatta	•	•	•		•		
59	Mohammad Saeed Hejaziyyeh	Accounting, IT Toubas			•		•		
60	Issam Taha Hamed	IT Tulkarem	•	•	•		•		

#	Trainees		Module 1	Module 2	Module 3	Module 4	Module 5	
	Trainee's Name	Trainee's Position	Principles of Property Valuation	Property Tax Valuation Standards: Purpose, Principles and Methodology	Use of P-TAX system for Valuation	Geo-PTAX	Trial Application	
							Desk	Field
61	Rima' Afeef Shreim	IT Qalqilya	•	•	•		•	
62	Osama Mohammad Khalil	IT Nablus			•		•	
63	Ayed Abdel-Lateef Zaben	IT Ramallah	•	•			•	
64	Baha' Khader Al-Atawneh	IT Bethlehem	•	•	•		•	
65	Hikmat Al-Najjar	IT Jericho			•			
66	Asma' Ibrahim Hijaz	Data Entry Ramallah			•			
67	Tawfiq Odeh	Data Entry Ramallah			•			
68	Hisham Al-Basha	Collection Ramallah	•	•	•	•		•
69	Razan Barahmeh	Data Entry Jericho	•	•				
70	Kawthar Farid Salim	Head of Staff Affairs Division	•	•				
Total	70		60	60	38	26	23	24

ANNEX 5

Module Plans and Teaching Methods

Modules/ Topics	Objectives	Content	Time	Trainees	Trainer	Training Method	Training Aids	Venue	Handouts	Evaluation
Module 1: Principles of Property Valuation	Be familiar with the main contents of the module.	-Property Appraisal -Real Estate Appraisal Career	1 hr	60	Mr. Nofal	Lecture (ppt)	Laptop, Projector, Screen, Flipchart, markers	Caesar Hotel	<input type="checkbox"/> Agenda <input type="checkbox"/> ppt <input type="checkbox"/> Reaction Evaluation sheet	Reaction Evaluation
	Explain the main contents of the module to his/her colleagues or relevant staff.	-Specifications and qualifications of valuers (Ethics and rules for valuation) -Conditions necessary to change								
Module 2: Property Tax Valuation Standards: Purpose, Principles, and Methodology	Teach/Train his/her colleagues or relevant staff on the main contents of the module.	-Purposes of formulating the new valuation standards -Valuation principles and methodologies -Municipality classification -Property value estimation (formula) -Standard values - Indicators: Area size and value influence factors	1 hr	60	Mr. Nofal Ms. Shatha	Lecture (ppt) Group Work (exercises)	Laptop, Projector, Screen, Flipchart, markers	Caesar Hotel	<input type="checkbox"/> Agenda <input type="checkbox"/> ppt <input type="checkbox"/> Exercises <input type="checkbox"/> Reaction Evaluation sheet	(Pretest- Posttest) Reaction Evaluation
	Be familiar with the main contents of the module.	-Structure of PTAX for valuation -Valuation records								
Module 3: Use P-TAX for Valuation	Explain the main contents of the module to his/her colleagues and relevant staff.		4.0 hrs	38	Expert Comp. Mr. Ayman Mr. Ahmad	Lecture (ppt) Group Work (exercises)	PCs,	PFI Center	<input type="checkbox"/> Agenda <input type="checkbox"/> ppt <input type="checkbox"/> Reaction Evaluation sheet	Reaction Evaluation
	Teach/Train his/her colleagues or relevant staff on the main contents of the module.	Understand interfaces and their related data for valuation. Make necessary data entry for valuation. Obtain field reports to proceed with estimation of appraised value.								
	Teach/Train other staff on how to operate P-TAX for NSV.									

Modules/ Topics	Objectives	Content	Time	Trainees	Trainer	Training Method	Training Aids	Venue	Handouts	Evaluation
	Be familiar with usefulness of GIS for property valuation. Identify and obtain necessary selected data for property from GIS. Make use of GIS data for property valuation. Teach/Train other staff on how to use GIS for property valuation.	-Structure of GIS and how to use it for valuation	8.0 hrs	26	Mr. Jamal Mr. Hani	Lecture (ppt) Group Work (exercises)	PCs,	MTIT Center	<ul style="list-style-type: none"> • Agenda • Manual • Reaction Evaluation sheet 	Reaction Evaluation
Module 4: Geo-PTAX	Be familiar with the estimation procedure of standard values. Explain the method of standard value estimation.	-Identify target areas for desk trials -Calculation of standard points	4.0 hrs	23	Ms. Shatha	Lecture (ppt) Group Work (exercises)	PCs,	MTIT, PPF Center	<ul style="list-style-type: none"> • Agenda • ppt • Block map • Reaction Evaluation sheet 	Reaction Evaluation
Module 5-1: Desk trial application	Be familiar with valuation procedures of Valuation Standards Operate field work in the process to apply valuation standards to lands and buildings	--Identify target areas for field trials -Examination of individual targets by using the valuation records -Estimation of appraised values for each target	4.5 hrs	24	Mr. M. Yousef Ms. Shatha Mr. Nagasawa	Lecture (ppt) Group Work (exercises)	PCs, laser meter, measure tape	Beitunia	<ul style="list-style-type: none"> • Agenda • ppt • Block map • Value influence factors • Valuation records • Posttest • Reaction Evaluation sheet 	(Pretest-Posttest) Reaction Evaluation
Module 5-2: Field trial application	Teach/Train others in all the process of valuation.									

ANNEX 6

Reaction Evaluation Sheet

Please Circle the Modules that you Have Taken and Evaluate Accordingly

Evaluation of the Training Modules		Select one of the four options			
		Excellent	Good	Average	Poor
1	Module 1: Principles of Property Valuation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
2	Module 2: Property Tax Valuation Standards: Purpose, Principles, and Methodology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
3	Module 3: Use P-TAX for Valuation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
4	Module 4: Geo-PTAX	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
5-1	Module 5-1: Desk Trial Application	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
5-2	Module 5-2: Filed Trial Application	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
Evaluation of the Trainer's Performance and Style		Excellent	Good	Average	Poor
7	Module 1: Principles of Property Valuation (Mr. Mahmoud Nofal)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
8	Module 2: Property Tax Valuation Standards (Ms. Shatha Kharraz)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
9	Module 3: Use P-TAX for Valuation (Expert Comp)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
10	Module 4: Geo-PTAX (Mr.Jamal)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Module 4: Geo-PTAX (Mr.Hani)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
11	Module 5-1: Desk Trial Application (Ms. Shatha Kharraz)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
12	Module 5-2: Filed Trial Application (Mr. Nagasawa)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Evaluation of General Items		Strongly Agree	Agree	Neutral	Disagree
13	The materials distributed were pertinent and useful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Strongly Agree	Agree	Neutral	Disagree
14	Adequate time was provided for particular sessions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Strongly Agree	Agree	Neutral	Disagree
15	Class participation and interaction were encouraged	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Strongly Agree	Agree	Neutral	Disagree
16	The training objectives were met	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Strongly Agree	Agree	Neutral	Disagree
17	I have benefited from this training and I recommend to conduct similar sessions in the future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Excellent	Good	Average	Poor
18	Overall, how do you rate the training sessions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19	What main points did you learn from the training? What skills you have gained?				

20	Please indicate any comments or suggestions you would like to add.

ANNEX 7
Pretest-Posttest
(Practical Exercises for Valuers)

Date : _____

Name : _____

Branch Office : _____

Through applying the new valuation standards methodology, please value the following properties, based on the data listed below as needed:

Exercise 1: Valuation of apartment 1 (indicated by red arrow) and the supermarket, parcel # 18, block # 1, Betunia Municipality.

Data:

- Betunia Municipality (category B)
- Block # 1
- Parcel # 18
- Land usage classification (according to the physical map) Commercial longitudinal
- Parcel area size 716 Sq.m.
- Number of floors in the building 2
- Floor area size 156 Sq.m.
- Number of units (apartments) in the building 4 (2 in each floor).
- Date of construction completion 10/05/2011
- Valuation date: 27 April 2016
- Road width: 20 m
- Location: Close to the city center, easy to access.
- Topography: Flat land
- Standard rent value for building:
 - Residential: 20 JD/ Sq.m.
 - Commercial: 30 JD/ Sq.m.
- Standard rent value for land: (commercial: 6.38 JD/ Sq.m.)
- Market Ratio: 20

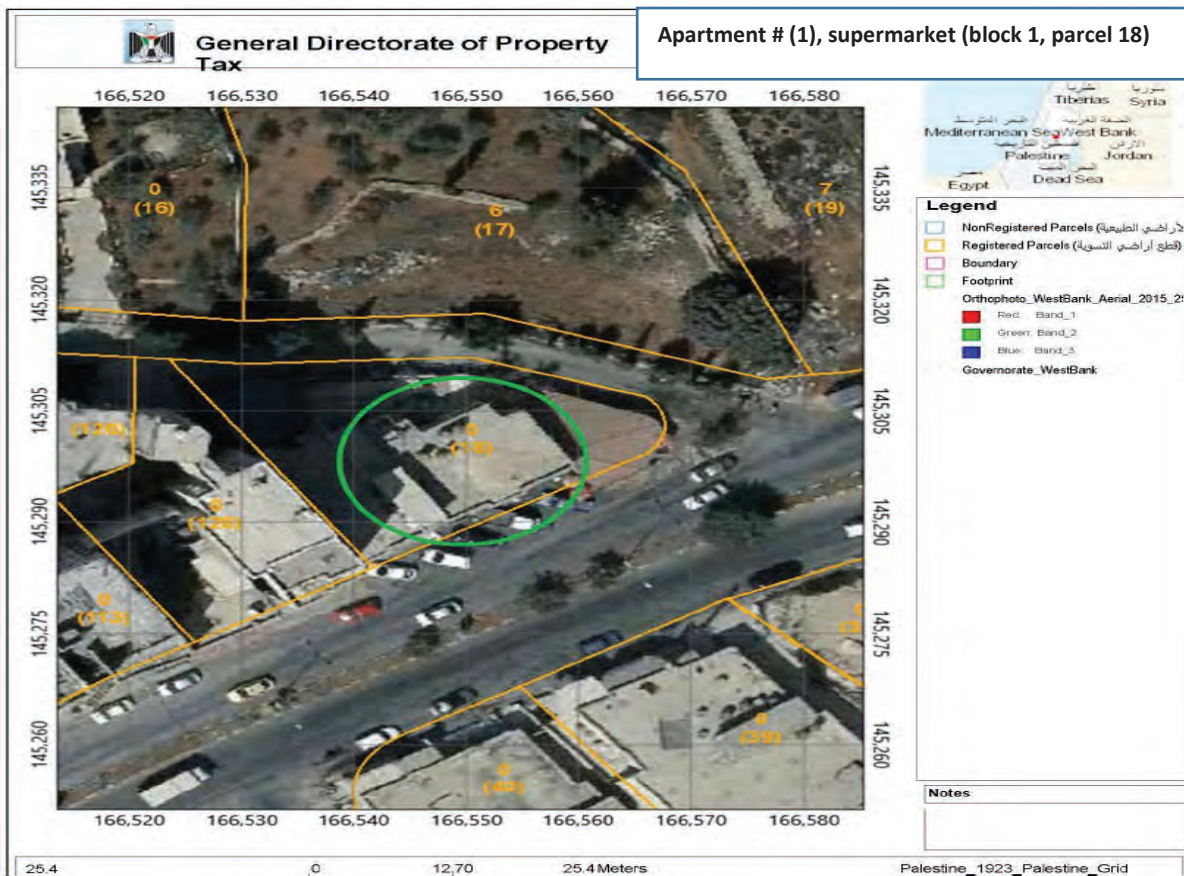
- Value adjustment matrix:

Value influence factors (Building)	Residential			Commercial		
	Standard	Superior	Inferior	Standard	Superior	Inferior
Building quality and condition	1.0	1.10	0.90	1.0	1.07	0.93
Services	1.0	1.05	0.95	1.0	1.07	0.93
Floor level	1.0	1.04	0.96	1.0	1.04	0.96
Building age	1.0	1.04	0.96	1.0	1.05	0.95

Value influence factors (Land)	Commercial		
	Standard	Superior	Inferior
Road width	1.0	1.06	0.94
Location	1.0	1.06	0.94
Topography	1.0	None	0.98
Parcel shape	1.0	None	0.98
Frontage	1.0	1.06	0.94

Answer (Property Value)

Exercise 1: Apartment # (1), supermarket (block 1, parcel 18)





Exercise 1 (Answer)

√ Apartment valuation:

- Usage classification: The photo above shows that the first floor is being used for residential purposes.
- Standard rent value for building: 20 JD/sqm (source: Base committee)
- Area size: $156/2=78$
- Quality and condition of the building : Standard, weight 1.0
- Services: Standard, weight 1.0
- Floor level: the apartment is located on the first floor, standard, weight 1.0
- Age of building: Superior, weight 1.04

Calculate the value by applying the formula

Estimated Property Value = Standard value* Area size* Net adjustment weight.

Estimated Value = $20*78*(1.0*1.0*1.0*1.04) = 1622$ JD

√ Supermarket valuation:

- Usage classification: The photo above shows that the ground floor is being used for commercial purposes.
- Standard rent value for building: 30JD/sqm (Source: Base Committee)
- Area size: 156 sqm.
- Quality and condition of the building : Standard, weight 1.0
- Services: Standard, weight 1.0
- Floor level: the supermarket is located on the ground floor, superior, weight 1.04
- Age of building: Superior, weight 1.05

Calculate the value by applying the formula

Estimated Property Value = Standard value* Area size* Net adjustment weight.

Estimated Value= $30*156*(1.0*1.0*1.04*1.05) = 5110$ JD

√ Land valuation:

- Usage Classification: Commercial.
- Standard rent value for land: 6.38 JD/sqm (TRIMMEAN from PTAX)
- Market ratio 20
- Standard market value for land: $(6.38 \times 20) = 128$ JD/sqm
- Area size: 716 sqm.
- Width of the road (from the map): 20, Superior, weight 1.06 (value adjustment matrix).
- Location (from the map): Close to the city center, easy to access, superior, weight 1.06 (value adjustment matrix).
- Topography: Flat land, standard, weight 1.0 (value adjustment matrix).
- Shape of land (from the map): irregular, inferior, weight 0.98 (value adjustment matrix).
- Frontage (from the map): 2 roads, standard, weight 1.0 (value adjustment matrix).

Calculate the value by applying the formula

Estimated Property Value = Standard value* Area size* Net adjustment weight.

Estimated Value = $128 \times 716 \times (1.06 \times 1.06 \times 1.0 \times 0.98 \times 1.0) = 100,601$ JD

Exercise 2: Valuation of a parcel # 78, block 1, Betunia Municipality

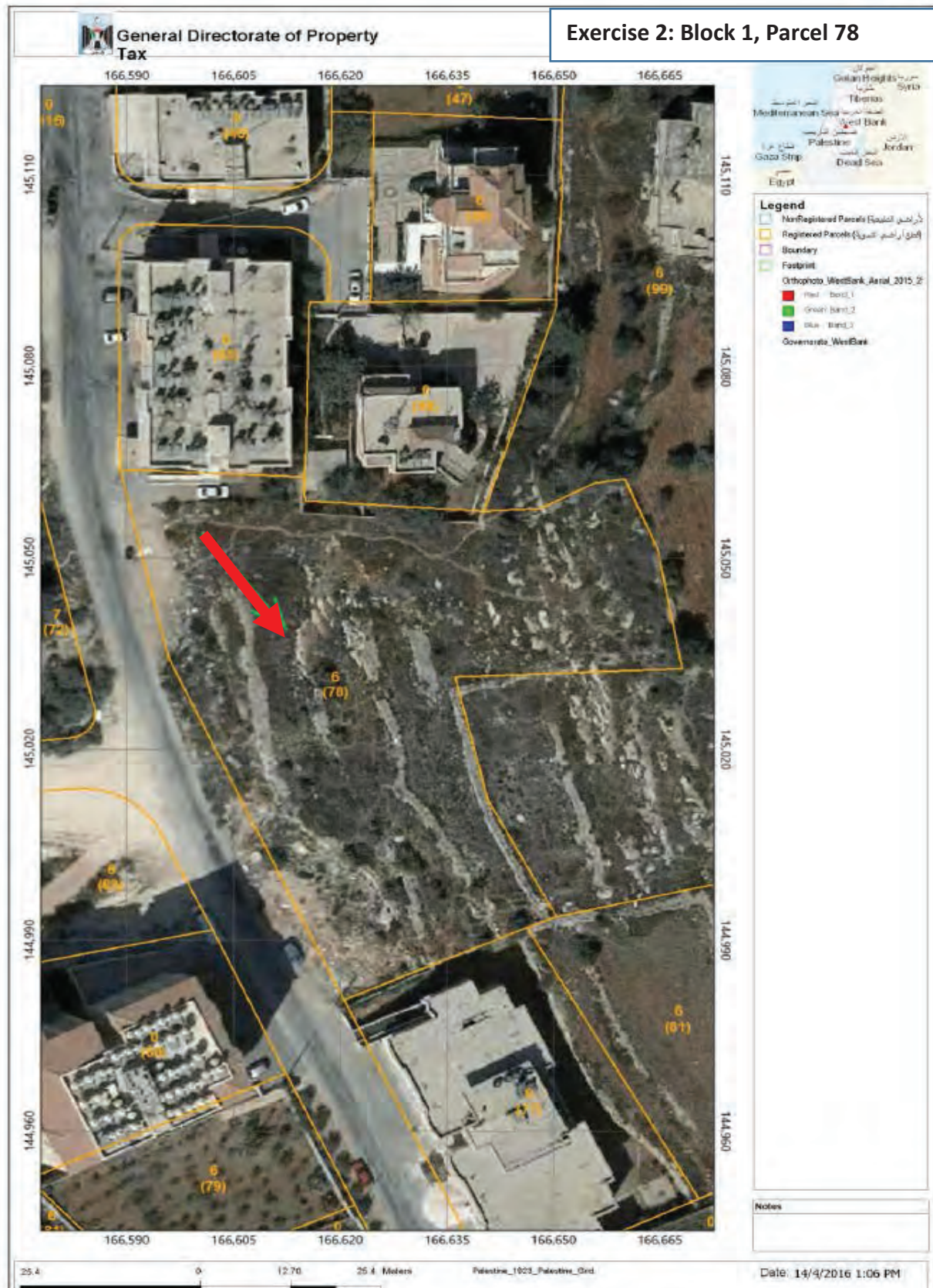
Data:

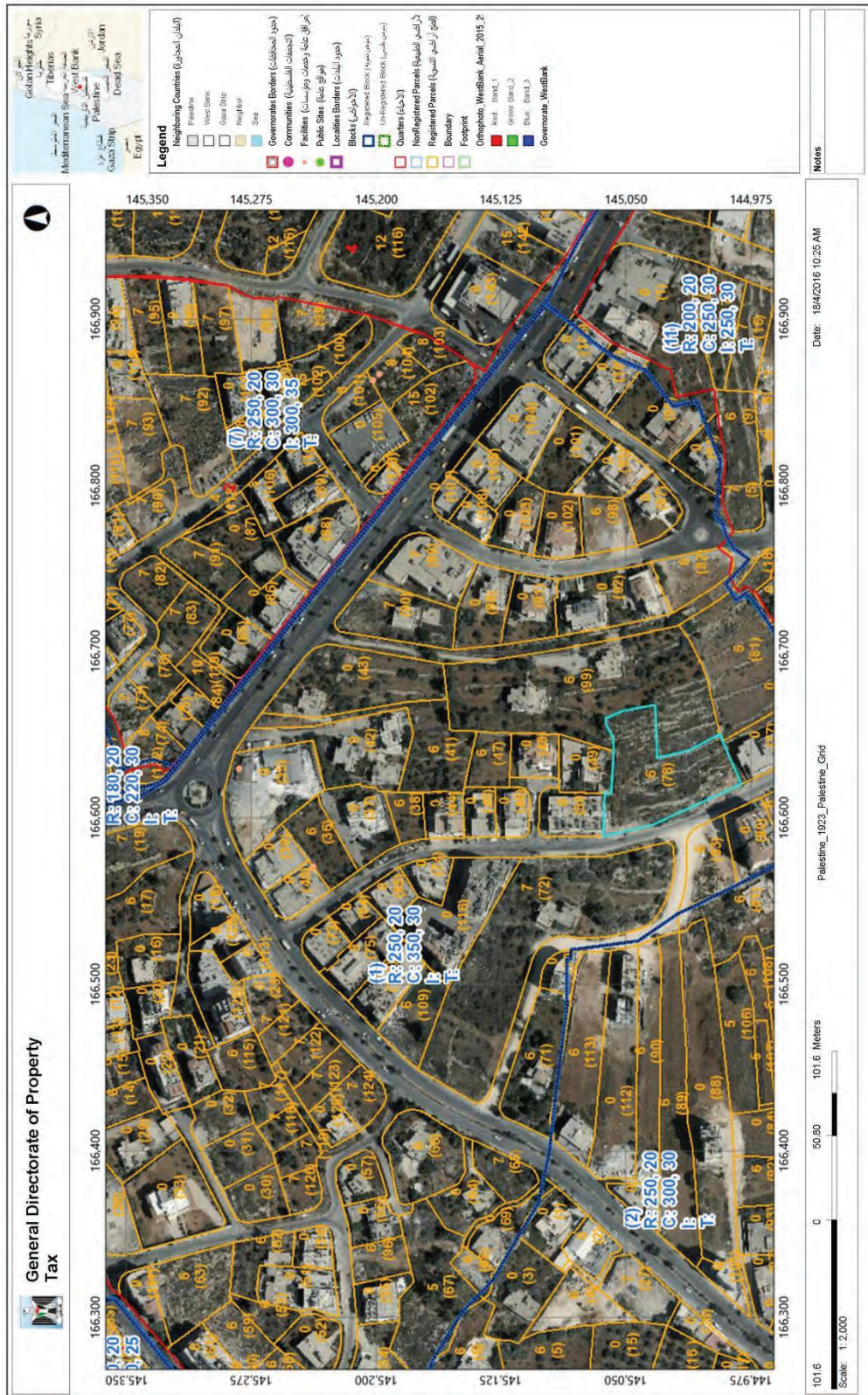
- Betunia Municipality, (category B)
- Block # 1
- Parcel # 78
- Land usage classification for land (according to the physical map), Residential.
- *Land area size : 3660 Sqm
- Road width: 12 m.
- Location: Accessible, services available.
- Topography: Flat land
- Valuation date : 27 April 2016
- Standard rent value for land: (residential:6.18 JD/Sqm)
- Market Ratio 20

Value adjustment Matrix:

Value influence factors (Land)	Residential		
	Standard	Superior	Inferior
Width of the road	1.0	1.05	0.95
Location	1.0	1.05	0.95
Topography	1.0	None	0.98
Shape of the Land	1.0	None	0.98
Frontage	1.0	1.05	0.95

Answer:**Estimated Land Value:** _____





Exercise 2 (Answer):√ Valuation of Parcel # 78 block 1, Betunia Municipality:

- Usage classification: Residential
- Standard rent value for land: 6.18 JD/sqm (TRIMMEAN From PTAX)
- Market Ratio 20
- Standard market value for land: $6.18 * 20 = 124$ JD/sqm
- Area size: 3660 sqm.
- Width of the road (from the map): 12m, superior, weight 1.05 (value adjustment matrix).
- Location: Accessible, services available, superior, weight 1.05 (value adjustment matrix).
- Topography: Flat land, standard, weight 1.0 (value adjustment matrix).
- Shape of the land (From the map): irregular, inferior, weight 0.98 (value adjustment matrix)
- Frontage (from the map): the parcel is located on one road, inferior, weight 0.95 (value adjustment matrix).

Calculate the value by applying the formula

Estimated Property Value = Standard value* Area size* Net adjustment weight.

Estimated Value = $124 * 3660 * (1.05 * 1.05 * 1.0 * 0.98 * 0.95) = 464,331$ JD

Exercise 3: Valuation of a parcel #102, block 2, Betunia Municipality

Data:

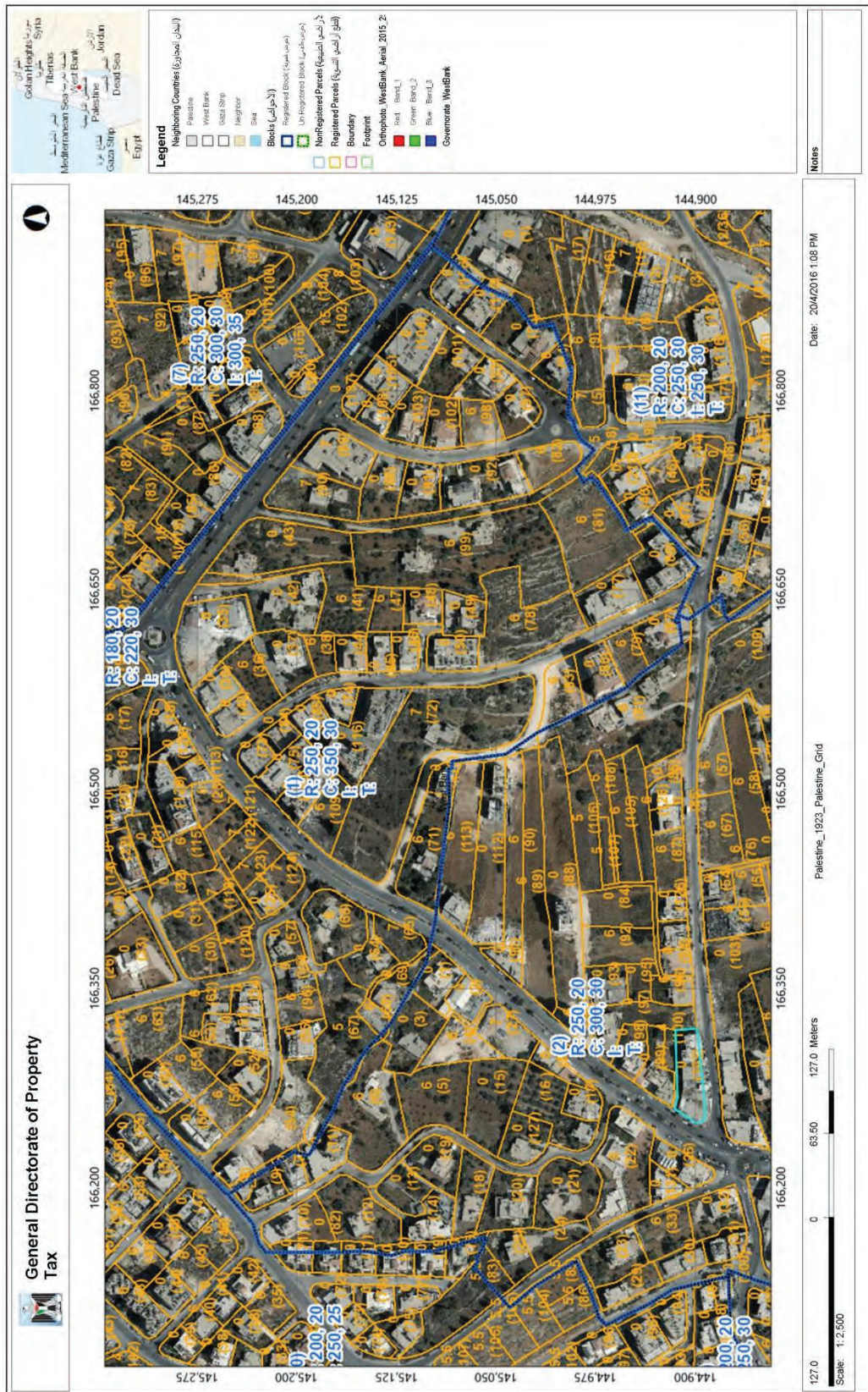
- Betunia Municipality, (category B)
- Block # 2
- Parcel # 102
- Land usage classification for land (according to the physical map), Commercial longitudinal
- *Land area size : 1274 Sqm
- Road width: 20 m.
- Location: Accessible, services available.
- Topography: Flat land
- Valuation date : 27 April 2016
- Standard rent value for land: (residential:5.85 JD/Sqm)
- Market Ratio 20

Value adjustment Matrix:

Value influence factors (Land)	Commercial		
	Standard	Superior	Inferior
Width of the road	1.0	1.06	0.94
Location	1.0	1.06	0.94
Topography	1.0	None	0.98
Shape of land	1.0	None	0.98
Frontage	1.0	1.06	0.94

Answer:**Estimated Land Value:** _____





Exercise 3 (Answer):√ Valuation of Parcel # 102 block 2, Betunia Municipality:

- Usage classification: Commercial
- Standard rent value for land: 5.85 JD/sqm (TRIMMEAN from PTAX)
- Market Ratio: 20
- Standard market value for land: $20 \times 5.85 = 117$ JD/sqm
- Area size: 1274 sqm.
- Width of the road (from the map): 20m, superior, weight 1.06 (value adjustment matrix).
- Location: Accessible, services available, superior, weight 1.06 (value adjustment matrix).
- Topography: Flat land, standard, weight 1.0 (value adjustment matrix).
- Shape of the land (From the map): Regular, standard, weight 1.0 (value adjustment matrix)
- Frontage (from the map): the parcel is located on 2 roads, standard, weight 1.0 (value adjustment matrix).

Calculate the value by applying the formula

Estimated Property Value = Standard value* Area size* Net adjustment weight.

Estimated Value = $117 \times 1274 \times (1.06 \times 1.06 \times 1.0 \times 1.0 \times 1.0) = 167,481$ JD