

CAN THO URBAN DEVELOPMENT AND RESILIENCE PROJECT

ANNEXS

**ENVIRONMENTAL AND SOCIAL
IMPACT ASSESSMENT**

ANNEXS

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Annex 1. List of Documents related to CTUDR Project

- Resolution No. 45-NQ/TW dated 17 February 2005 of the Ministry of Politics on construction and development of Can Tho city in the period of 2009 – 2015;
- Resolution No. 57/NQ-CP dated 04 May 2013 of the Government on land use planning up to 2020 and land use plan for 5 early years (2011-2015) of Can Tho city;
- Decision No. 1721/QD-BNN-TCTL dated 20 July 2012 of the MARD on approving water resources planning against flooding for Can Tho city;
- Decision No. 1533/QD-TTg dated 30 August 2013 of the Prime Minister on approving the master plan on socio-economic development of Can Tho city up to 2020 and vision to 2030;
- Dispatch No. 6148/UBND-XDDT dated 17 December 2013 of Can Tho CPC on proposing to implement the priority infrastructure development projects, urban upgrading and climate change resilience projects for Can Tho city and the Mekong delta region (now known as CTUDP);
- Dispatch No. 10816/VPCP-QHQT dated 24 December 2013 of the Government Office conveying opinions of the Deputy Prime Minister, Hoang Trung Hai on proposing the implementation of WB-funded project of Can Tho CPC;
- Dispatch No. 42/UBND-XDDT dated 03 January 2014 of Can Tho CPC on proposing support from WB for the priority infrastructure development project, urban upgrading and climate change resilience for Can Tho city and the Mekong delta region;
- WB's letter dated 24 January 2014 sent to Can Tho CPC on financial support from WB for Can Tho city and Mekong delta priority infrastructure development project;
- WB's letter dated 04 July 2014 sent to Can Tho city People's Committee on conducting Workshop held from 16 to 20 June 2014 for studying Can Tho city's advantages;
- Dispatch No. 3127/UBND-XDDT dated 27 June 2014 of Can Tho city People's Committee on preparation of the Can Tho city and Mekong delta region Development, Upgrading and Climate Change Resilience Project (now known as Can Tho Urban Development and Resilience Enhancement Project);
- Decision No. 3488/QD-UBND dated 25 November 2014 of the Chairman of Can Tho city People's Committee on supplement of investment preparation fund, advance payment of basic construction for the projects funded by State budget in 2014;
- Dispatch No. 1007/UBND-XDDT dated 10 March 2015 of Can Tho city People's Committee on assignment of the task of project preparation and implementing procedures related to selection of bidders for Can Tho Urban Development and Resilience Enhancement Project.

Annex 2: List of Proposed Investment Items and Results of Its Baseline Survey

I. List of Proposed Investment Items:

No.	List of Proposed Investment Items	Ward	District	Length	Width
Component 1: Flood control and environmental sanitation					
I.	Proposed flood control systems:				
1	Can Tho river embankment and Building road and park behind embankment (<i>section from Ngo Duc Ke to Cai Son ditch</i>)	An Bình, Hưng Lợi, An Lạc, Xuân Khánh, Tân An	Ninh Kiều	5,5Km	
2	Cai Son – Muong Khai ditch anti-landslide embankment: + <i>Route 1: From Cai Son bridge to Provincial road 923, length of 1.6km.</i> + <i>Route 2: From Cai Son bridge to the road connecting August Revolution road with provincial road 918, length of 2.1km.</i>	An Bình Long Tuyền	Ninh Kiều Bình Thủy	3,7 Km	
3	Building Cai Khe dock	Cái Khế, An Hội	Ninh Kiều		60 m
4	Building Dau Sau dock	An Bình, Hưng Lợi	Ninh Kiều		25 m
5	Tide locks on flood control corridor:		Ninh Kieu Bình Thủy		
5.1	Tide lockatTham Tuong ditch (above Can Tho river embankment). Renovatedolddrain system.				15m
5.2	Tide lockatTran Ngoc Que (above				5m

No.	List of Proposed Investment Items	Ward	District	Length	Width
	Can Tho river embankment)				
5.3	Tide lockatTham Tuong ditch (above Can Tho river embankment)				5m
5.4	Tide lockatHang Bang ditch (above Cai Son – Muong Khai ditch embankment)				15m
5.5	Tide lockatPho Tho ditch (above Cai Son – Muong Khai ditch embankment)				5m
5.6	Tide lockatCay Dua ditch (above Cai Son – Muong Khai ditch embankment)				5m
5.7	Tide lockatSao ditch (above the road connecting the August revolution road to provincial road 918).				5m
5.8	Tide lockatBa Sao ditch (above the road connecting the August revolution road to provincial road 918).				5m
5.9	Tide lockatRanh ditch (above the road connecting the August revolution road to provincial road 918).				5m
5.10	Tide lockatSuc ditch (above the road connecting the August revolution road to provincial road 918).				15m
5.11	Tide lockatirrigationcanal (above the road connecting the August revolution road to provincial road 918).				5m

No.	List of Proposed Investment Items	Ward	District	Length	Width
5.12	Tide lockat Nuoc Lanh ditch (above the road connecting the August revolution road to provincial road 918).				15m
5.13	Tide lockatbranch of Nuoc Lanh ditch (above the road connecting the August revolution road to provincial road 918).				5m
6.	Renovation of canals/ditches in the core urban area:				
6.1	Renovation of Nga Bat ditch: Dredging, Soft embankment with concrete and planting treesholdshores.	An Khanh Hung Loi	Ninh Kieu	970m	
6.2	Renovation of Hàng Bàng ditch: Dredging, Soft embankment with concrete and planting treesholdshores.	An Binh Long Tuyen An Khanh	Ninh Kieu Binh Thuy Ninh Kieu	2300m	
6.3	Renovation of Muong Cui ditch Dredging, embankment by stone quarry, planting trees in the vacant position	Hung Lợi An Khánh	Ninh Kiều	780m	
6.4	Renovation of Ong Ta ditch (the main ditch): Dredging, Soft embankment with concrete and planting trees above.	An Khanh	Ninh Kieu	1320m	
6.5	Cải tạo rạch Xẻo Lá: Renovation of Xeo La ditch: - Section 1: crossing withBunXang lake. Dredging, Soft	An Khanh	Ninh Kieu	1200m	

No.	List of Proposed Investment Items	Ward	District	Length	Width
	embankment, planting trees and building the management road. - Section 2: inresidential areas, Dredging, stone embankment, planting trees above embankment.				
6.6	Cải tạo rạch Xẻo Nhum: Renovation of Xeo Nhung ditch: Dredging, unfreeze the flow, planting trees protect embankment.	An Khánh	Ninh Kiều	1120m	
6.7	Cải tạo rạch Từ Hồ: Renovation of Tu Ho ditch: - Section 1: Dredging, Soft embankment, planting trees, and building the management road. - Section 2: build box culverts.	An Khánh	Ninh Kiều	915m	
6.8	Renovation of Ba Le ditch: Dredging, stone embankment	Hưng Lợi	Ninh Kiều	700m	
6.9	Renovation of Ba Bo ditch: - Section 1: from Hang Bang ditch to Nguyen Van Linh road: Soft embankment - <i>Section 2: from Nguyen Van Linh to Vo Van Kiet road: Soft embankment, planting trees.</i> - Section 3: from Vo Van Kiet to Sao ditch: Soft embankment, planting trees and building the management road.	An Khánh An Thới Long Hòa	Ninh Kiều Bình Thủy	3440m	
6.10	Renovation of 91B road ditch: build box culverts.	Hưng Lợi	Ninh Kiều	1000m	
6.11	Renovation of Sao ditch (Ninh				



No.	List of Proposed Investment Items	Ward	District	Length	Width
	Kieu) Dredging, stone embankment and building the management road.				
6.12	Renovation of Ong Dao ditch: build box culverts.				
6.13	Renovation of Cay Me ditch: Dredging, unfreeze the flow, Soft embankment and planting trees.				
7	Building detention lake for storing water in the core urban area:				
7.1	University village regulation reservoir: 4,48 ha	Long Tuyen	Binh Thuy		
7.2	Long Hoa regulation reservoir: 7,87ha	Long Hoa	Binh Thuy		
8.	Environmental sanitation improvement works				
8.1	Improving Hoang Quoc Viet road infrastructure: <i>(1) from 923 – Nguyen Van Cu: 30m</i> <i>(2) from Nguyen Van Cu – Nguyen Van Linh: 13m</i>	An Binh An Khanh	Ninh Kieu		
8.2	Renovating drainage system in the center of Ninh Kieu district: Drainage direction: flowing on the Xang Thoi lake 4 main drainage lines: <i>(1) Phan Dinh Phung- Nguyen Thai Hoc – De Tham</i> <i>(2) Hoa Binh avenue (Quang</i>				




No.	List of Proposed Investment Items	Ward	District	Length	Width
	<p><i>Trung bridge) – De Tham</i></p> <p><i>(3) Hoa Binh avenue (Xo Viet Nghe Tinh road - De Tham road)</i></p> <p><i>(4) Vo Thi Sau – Nguyen Khuyen – De Tham</i></p> <p>Building pump station at Xang Thoi lake.</p>				
Component 2: Urban corridor development					
1	<p>Building Quang Trung bridge (bay 2)</p> <ul style="list-style-type: none"> - Construction of a new bridge section - Extending the existing bridge - Construction of the bridge path - Construction of lighting systems 	<p>Xuân Khánh</p> <p>Hung Phú</p>	<p>Ninh Kiều</p> <p>Cai Rang</p>	481m	11m
2.	Building Tran Hoang Na road bridge, and parallel road IC3	<p>Hung Loi</p> <p>An Binh</p> <p>An Khanh</p> <p>Hung Thanh</p>	<p>Ninh Kieu</p> <p>Cai Rang</p>	3794m	
3.	Building the road connecting the August revolution road to provincial road 918	<p>An Thoi</p> <p>Long Hoa</p> <p>Long Tuyen</p>	<p>Binh Thuy</p>		
4	<p>Building residential areas for resettlement:</p> <p>Infrastructure Construction: road, Drainage, water supply, light up, green trees, culture house... with 53ha area</p>	<p>An Binh</p>	<p>Ninh Kieu</p>		



II. Results of Its Baseline Survey

1. Can Tho river embankment (section from Ngo Duc Ke to Cai Son ditch):

Status: The left bank was built and a part of embankment to Ngo Duc Ke road was built. The area where the embankment crosses is crowded. There are some sections to be encroached and regularly landslided. Below are some pictures of current status of Can Tho river section to be built with the embankment.

No .	Section	Characteristics of the route	Illustrative picture
<i>Can Tho river (Ngo Duc Ke – Cai Son ditch)</i>			
	Km0 – Km1+420	<p>Coordinates of start point: 10°01'47,69"N - 105°47'16,64"E</p> <p>The start point begins from the interchange of Ngo Duc Ke road and Vo Thi Sau road, stretching to end of Nguyen Thi Minh Khai road. The population is crowded and many households living adjacent to river bank, encroach the river bank. There is no embankment in this section. There are two successive roads along the river banks, including Vo Thi Sau and Nguyen Thi Minh Khai. Road pavement is paved with asphalt, built with sidewalk but non-homogeneous, built with drainage system and lighting system. The start point section has Preventive Medicine Center of the city, guest house No. 2 (Km0); 2 markets of Tan An (Km0+220) and An Lac (Km0+710) located near river banks, Cathedral (Km0+480) with coordinates (10°01'36,72"N - 105°47'06,42"E); Ninh Kieu Methadone treatment facility (Km0+850) ; The Military Court of Region 9 (Km0+860); Quang Trung bridge (Km0+985); Nguyen Thi Minh Khai bridge (Km1+300)</p>	 

No .	Section	Characteristics of the route	Illustrative picture
	Km1+420 - Km2+080	The river bank section from the end of Nguyen Thi Minh Khai road to head of Tam Vu road. This section has no road along riverbank, therefore, few population live near riverbank.	
	Km2+080 – Km4+830	Riverbank section from Tam Vu road is concentrated with several manufacturing and business facilities of building materials. The population is crowded in the opposite side. There is no permanent embankment. Current road pavement is paved with asphalt with damaged, flooded sections without sidewalk, drainage system but equipped with lighting system. In the beginning of this section, there is Can Tho Priest Retirement Center (Km2+120), Quan Phong God Monastery (Km2+250), Hung Loi bridge (Km2+460), Nguyen Hien primary school (Km2+780) with coordinates (10°00'58,28"N - 105°46'18,92"E), Inland Waterways Management and Maintenance Joint Stock Company No. 12 (Km3+620).	
	Km4+830 – Km4+910	The manufacturing factory from end of Tam Vu road to Dau Sau ditch.	





No .	Section	Characteristics of the route	Illustrative picture
	Km4+970 – Km5+270	This section has no embankment, civil road along the riverbank. The concrete road is narrow, without drainage and lighting systems. The population is crowded on one frontage side to the riverbank. This section has Ong church (Km5+000) with coordinates of (10°00'35,12"N - 105°45'19,30"E).	
	Km5+270 – Km5+870	The end section of route has no protective embankment, no roadway along riverbank. The population is crowded near Cai Rang bridge pier. This section has Cai Rang bridge (Km5+620), An Binh market (Km5+700). Coordinates of An Binh market: 10°00'27,77"N - 105°44'57,08"E.	





2. Cai Son ditch anti-landslide embankment: Status of Cai Son ditch (Can Tho river – Long Hoa prison)

Status:





- Seriously landslide status.
- The existing local road of 2m width is subsiding and lowered.
- The population is crowded in the beginning of ditch. If building of operational management road, it will affect households in this area.
- Hoang Quoc Viet road section is crowded and difficult in the site clearance.





No .	Route	Characteristics	Illustrative pictures
Cai Son ditch (Can Tho river – Long Hoa prison)			

No .	Route	Characteristics	Illustrative pictures
	Km0 – Km0+100	The population is crowded in two side of ditch, there is no road in two sides of ditch, average width of about 55m. At section Km0+000 passing through Can Tho river, Km0+085 has Lo Vong bridge over the ditch.	
	Km0+100 – Km1+080	The population is crowded in two side of ditch. Having road along two sides of ditch, average ditch width of about 50m. At section Km0+230 has Giac Thien church with coordinates of 10°00'29,77"N - 105°44'45,91"E.	 
	Km1+080 – Km1+460	The populated is crowded on the left of ditch, has road in ditch. On the right, the population is sparse and mixed with garden, there is no road. Average ditch width of about 50m.	

No .	Route	Characteristics	Illustrative pictures
	Km1+460 – Km1+880	On two sides of ditch, there are gardens. There is only road on the left side of creek. Average width of about 50m ditch . At position 660 and K1 + Km1 + 775 The Son bridge , concrete bridge spanning the canal in place , At Km1 + 710 section through Hang Bang ditch.	
	Km1+880 – Km3+320	The population is sparse, mixed with garden land, tree garden. Having small road in two sides. Average ditch width of about 45m. At section Km2+040 and Km3+300 passing through two grade 3 ditch.	
	Km3+320 – Km3+690	The population is crowded in two side of ditch, there is road in two sides of ditch. Average ditch width of about 40m.	
	Km3+690 – Km3+890	On the right side of ditch mainly are gardens. The population is crowded on the left. There is no road. Average ditch width of about 40m. At section Km3+810 passing through grade 3 ditch.	

3. Status of Dau Sau ditch




No .	Route	Characteristics	Illustrative picture
Dau Sau ditch (from Can Tho river – Dau Sau ditch bridge – Ba Bo ditch)			
	Km0 – Km0+880	The population is crowded in two side of ditch, there is local road in two sides of ditch, average width of about 35-45m. At section Km0+000 passing through Can Tho river, at section Km0+085 has Dau Sau bridge over the ditch.	
	Km0+880 – Km1+345	The population is sparse, mixed with garden land, on the right of ditch, there is road along ditch, average ditch width of about 45-50m. Passing with Nga Bat ditch at position Km1+105), Tinh That Ngoc An (10°01'03,68"N - 105°45'06,63"E) located on right of ditch at position Km1+190.	
	Km1+345 – Km1+530	The population is crowded in two sides of ditch. There is road. Average ditch width is about 50m.	
	Km1+530 – Km1+630	Mainly vacant land, garden. There are roads along two sides of ditch. Average ditch width of about 50m.	

No .	Route	Characteristics	Illustrative picture
	Km1+630 – Km1+900	The population is crowded in two sides. There are road along two sides of the ditch. Average ditch width of about 50m. Having concrete bridge overcrossing at position Km1+860.	
	Km1+900 – Km2+240	The population is crowded on the left of ditch, the right side is mainly vacant land and mixed gardens. There are roads along two sides of the ditch. Average ditch width of about 50m. Passing through Xeo Nhum ditch at position Km2+120.	
	Km2+240 – Km2+480	The population is crowded on the left of ditch. The population is sparse on the right side, mixed with vacant land and mixed gardens. There are roads along two sides of the ditch. Average ditch width of about 50m.	
	Km2+480 – Km2+600	The population is crowded on the left of ditch. There is vacant land and mixed gardens on the right. There are roads along two sides of the ditch. Average ditch width of about 50m. At position Km2+590 has Dau Sau bridge overcrossing ditch, Km2+600 passing through Hang Bang ditch.	

4. Status of Hang Bang ditch

Status:




- The population is crowded in two sides, leading to pollution and lost landscape.
- Two sides of ditch are landslide at some sections.
- Inner side is stagnant with waste sludge and shallower.





No.	Route	Characteristics	Illustrative picture
Hang Bang ditch (Cai Son ditch – Dau Sau ditch bridge on Nguyen Van Cu road)			
	Km0 – Km1+570	The section from Cai Son ditch to Ba Bo ditch. The population is crowded on the right of route due to distance to the ditch of about 70m to 100m. Hoang Quocs Viet road runs along the route. The population is sparse on the left side of route, mainly mixed garden. Average ditch width of about 15m. At section Km0+000 through Cai Son ditch, Km1+460 through tertiary ditch, Km1+520 through Suc ditch, Km1+570 through Ba Bo ditch.	
	Km1+570 - Km2+170	The section from Ba Bo ditch towards Dau Dau ditch bridge on Nguyen Van Cu road. The population is crowded on two sides. Average ditch width of about 10m. At section Km1+640 intersecting with Hoang Quoc Viet road, Km1+995 through tertiary ditch, Km2+165 has concrete bridge passing through.	
	Km2+170 - Km2+400	The population is crowded on the right of ditch. On the left of ditch is garden land. Average ditch width of about 10m. At section Km2+400 through Dau Sau ditch at Dau Sau ditch bridge on Nguyen Van Cu road.	





5. Status of Ba Bo ditch

Status:

- The population is crowded in two sides of ditch, leading to pollution and lost landscape.
- Some sections in two sides of ditch are landsliding.
- Inner section is stagnant with waste sludge and shallower.
- Hoang Quoc Viet road run pallelly with the degraded ditch, therefore, it is possible to expand toward the ditch to create landscape.

No .	Route	Characteristics	Illustrative pictures
	Km0 – Km0+310	The population is sparse on two sides of ditch, mainly mixed garden. On the left of ditch, there is road and on the right of ditch, there is no road. Average ditch width of about 23m. At position Km0+000 through Hang Bang ditch.	
	Km0+310 – Km0+450	The population is sparse on the left of ditch, mainly mixed garden. There is road in two sides. The population is crowded on the right of ditch. There is no road. Ba Bo bridge on Nguyen Van Linh passes through the ditch at section Km0+425. Average ditch width of about 23m.	
	Km0+450 – Km0+920	Average ditch width of about 23m. The population is crowded on the left of ditch, there is no road on two sides of ditch. The population is sparse on the right of ditch, mainly mixed garden, there is road.	




No .	Route	Characteristics	Illustrative pictures
	Km0+920 – Km1+890	The population is sparse on two sides of ditch, mainly mixed garden. There is no road. Average ditch width of about 23m. At position Km1+680, is concrete bridge crossing over ditch, Km1+180 through Ngong ditch, Km1+860 through tertiary ditch.	
	Km1+870 – Km2+300	On the left of ditch is the park. There is no embankment, road behind the park. On the right of ditch is mainly mixed garden vacant land. There is no road along the ditch. Average ditch width of about 23m	
	Km2+300 – Km2+470	The population is crowded on the left of ditch, there is no road along ditch. The left side of ditch is mainly vacant land, mixed garden. There is no road along ditch. Ba Bo bridge on Nguyen Van Cu road crosses over ditch at position Km2+415.	
	Km2+470 – Km2+970	The left of ditch is mainly mixed garden vacant land. There is no road along ditch. The population on the right is crowded. Tran Quang Dieu road runs along the ditch. Average ditch width of about 20m.	

No .	Route	Characteristics	Illustrative pictures
	Km2+970 – Km3+030	Two sides of ditch is mixed garden vacant land. There is no road along the ditch. Average ditch width of about 20m.	
	Km3+030 – Km3+140	The population is crowded on the left of ditch. There is no road along the ditch. The right of ditch is mixed garden vacant land and no road. Average ditch width of about 20m.	
	Km3+140 – Km3+230	Two sides of ditch is mixed garden vacant land. There is no road along the ditch. Average ditch width of about 20m.	
	Km3+230 – Km3+400	At section Km3+400 thông với rạch Sao. The population is crowded on the left of ditch. There is no road along the ditch. The right of ditch is mixed garden vacant land. Tran Quang Dieu road runs along the ditch. Ditch width of about 20m.	

6. Status of Ngong ditch

Status:



- Flow direction from Cai Khe ditch to Ba Bo ditch.
- Landslide occurs at some sections.
- Several sections of existing road have no ditch, therefore, it is difficult to expand because of encroachment by some households.

No .	Route	Characteristics	Illustrative pictures
Ngong ditch (Ba Bo ditch – Ngong 2 ditch bridge)			
	Km0 – Km0+760	Average ditch width of about 40m. Thông với rạch Từ Hồ ở vị trí Km0+700. The population is crowded on two sides of ditch. There is road on two sides, about 2-10m from banks. Near banks, there is mixed garden vacant land.	
	Km0+760 – Km1+050	Average ditch width of about 40m. The population is crowded on the right. There is road along ditch. The population is sparse on the right with mixed garden vacant land. There is no road along the ditch.	
	Km1+050 – Km1+500	The population is crowded on the left of ditch. There is road along the ditch. The population is sparse on the right with mixed garden vacant land. There is road along the ditch. Average ditch width of about 38m. Rach Ngong 2 bridge cross over the ditch at position Km1+480.	

7. Status of Ba Le ditch

Status:

- The population is crowded in two sides.
- Currently, the ditch bed is stagnant with waste and landslide, affecting the flow circulation.
- It is very difficult to expand due to encroachment by some households. The existing road is 2m wide in one side for flow circulation.





No.	Route	Characteristics	Illustrative picture
Ba Le ditch			
	Km0 – Km0+450	The population is relatively crowded on two sides of ditch. The right side of ditch has no road along ditch. The left of ditch has Alley 160 Tam Vu along the ditch, about 5-15m from the ditch. At position Km0+000 through Can Tho river, Km0+060 has iron bridge crossing over the ditch. Average ditch width of about 16m	
	Km0+450 – Km0+700	The population is crowded on the right of ditch and there is no road along ditch. The population is relatively crowded with mixed garden vacant land on the left side. Average ditch width of about 15m.	


8. Status of Tu Ho ditch

Status:

- The population is sparse in two sides.
- The ditch is sedimented by alluvium and trees grown in the ditch bed, affecting circulation of flow.
- The existing earth road is 2m wide.

No.	Route	Characteristics	Illustrative pictures
Tu Ho ditch			

No .	Route	Characteristics	Illustrative pictures
	Km0 – Km0+130	The population is crowded on the left of ditch. There is no road along ditch. The population is sparse on the right of ditch, about 15m far from ditch. On road near ditch there is mixed garden vacant land. Average ditch width of about 19m. At section Km0+000 through Ngong ditch, Km0+020 has concrete bridge crossing over the ditch.	
	Km0+130 – Km0+200	On the left of ditch is mixed garden vacant land. There is no road along ditch. The population is sparse on the right, about 15m from the ditch. The road side near ditch is mixed garden vacant land. Average ditch width of about 15m.	
	Km0+200 – Km0+340	The population is crowded on the left of ditch. There is no road along ditch. The population is sparse on the right of ditch, about 15m far from ditch. On road side near ditch there is mixed garden vacant land. Average ditch width of about 19m. At section Km0+020 has concrete bridge crossing over the ditch.	
	Km0+340 – Km0+380	Two sides of ditch is mixed garden vacant land. There is no road along ditch. Average ditch width of about 19m.	

No .	Route	Characteristics	Illustrative pictures
	Km0+380 – Km0+915	The population is relatively crowded in two sides of ditch. There is no road along ditch. Average ditch width of about 19m. Nguyen Tri Phuong bridge crosses over ditch at position Km0+470.	

9. Nga Bat ditch:

- The ditch is sedimented by alluvium and trees grown in the ditch bed, affecting circulation of flow.
- Average ditch width of about 8-15m. The population is crowded in two sides of ditch. There is road along ditch. There is concrete bridge crossing over the ditch at position Km0+145, through Muong Cui ditch at position Km0+655. Average ditch width of about 8-15m








10. Status of Xeo Nhum ditch

Status:

- The population is crowded in two sides of the ditch.
- The ditch is sedimented by sludge and soil due to landslide and waste causing the pollution, affecting the circulation of flow.
- There is no existing road in two sides.

No .	Route	Characteristics	Illustrative pictures
Xeo Nhum ditch (Dau Sau ditch to Nguyen Van Linh (bridge No. 3) to Nguyen Hien road)			



No .	Route	Characteristics	Illustrative pictures
	Km0 – Km0+210	The population is crowded on the left of ditch. There is road along ditch, about 10m from ditch. The population is relatively crowded on the right of ditch. There is road along ditch on the right. Concrete bridge crosses over the ditch at position Km 0+015. Average ditch width of about 12m.	
	Km0+200 – Km0+360	On the left of ditch is mixed garden vacant land. There is road along ditch. The population is sparse with mixed garden vacant land on the right and road along ditch. Average ditch width of about 12m.	
	Km0+360 – Km0+410	The population is crowded closely in two sides of ditch with road along ditch. Average ditch width of about 10m.	
	Km0+410 – Km0+770	The population is crowded closely in two sides of ditch, without road along ditch. Average ditch width of about 10m. At section Km0+575 has concrete bridge crossing over the ditch.	





No .	Route	Characteristics	Illustrative pictures
	Km0+770 – Km0+870	Average ditch width of about 10m. The population is crowded nearly the left side of ditch, and sparse on the right side with mixed garden vacant land. Average ditch width of about 10m.	





11. Status of Xeo La ditch

Status:

- The population is crowded in two sides of the ditch.
- The ditch is sedimented by duckweed and waste and shallower toward inner side.
- The existing road in two sides is very narrow.

No .	Route	Characteristics	Illustrative pictures
<i>Xeo La ditch (Bun Xang lake behind Can Tho University – Nguyen Van Linh and Nguyen Van Cu roads)</i>			
	Km0 – Km0+180	Two sides of ditch is mixed garden vacant land. There is no road along ditch. Average ditch width of about 15m.	
	Km0+180 – Km0+240	The population is crowded closely in two sides of ditch, without road along ditch. Iron ditch crossing ditch at position Km0+220. Average ditch width of about 15m.	
		Branch toward Nguyen Van Linh road	




No .	Route	Characteristics	Illustrative pictures
	Km0+230 – Km0+340	The population is crowded on the left of ditch, 10m from ditch have Lo Mo alley along the ditch. On the right bank, there is mixed garden vacant land, without road. Average ditch width of about 14m.	
	Km0+320 – Km0+390	The population is crowded on the left side of ditch, there is no road along the ditch. On the right is mixed garden vacant land and no road along ditch. Average ditch width of about 14m.	
	Km0+390 – Km0+615	The population is crowded in two sides of ditch, there is no road along ditch. Average ditch width of about 14m.	
	Km0+615 – Km0+680	The population is crowded on the left of ditch. On the right of ditch is mixed garden vacant land. There is no road along the ditch. Average ditch width of about 14m.	
Branch toward Nguyen Van Cu road			





No .	Route	Characteristics	Illustrative pictures
	Km0+240 – Km0+330	The population is crowded in two sides of ditch. On the left, there is no road along ditch. Lo Mo alley is about 10m from ditch, crossing concrete bridge at position Km0+255 and Km0+305.	
	Km0+330 – Km0+445	The population is crowded on the left of ditch. There is no mixed garden land on the right. There is no road along the ditch. Average ditch width of about 12m.	
	Km0+455 – Km0+480	Both two sides of ditch is mixed garden, there is no road. Average ditch width of about 12m.	
	Km0+480 – Km0+670	The population is crowded on the right. On the left of ditch is mixed garden vacant land. There is no road in two sides of ditch. At position Km0+580 is concrete bridge passing over the ditch.	





12. Status of Ong Ta ditch


Status:

- The population is crowded in two sides.
- The ditch is landslide at some sections and becomes shallower and narrower into inner side.
- The existing road is earth road/dirty road.

No.	Route	Characteristics	Illustrative pictures
Ong Ta ditch (Can Tho university lake – Can Tho television station lake)			
	Km0 – Km0+125	The population is crowded in two sides of ditch. There is only road along ditch. Iron bridge crossing over ditch at position Km0+015. Average ditch width of about 25m.	
	Km0+125 – Km0+220	The population is crowded in two sides of ditch. The left side is mixed garden vacant land. There is only road on the right of ditch. Average ditch width of about 25m.	
	Km0+220 – Km0+270	The population is crowded closely in two sides. There is only road on the right. Average ditch width of about 22m.	

No.	Route	Characteristics	Illustrative pictures
	Km0+270 – Km0+330	The population is sparse on the left side. The right side is mixed garden vacant land. There is only road on the right of ditch. Average ditch width of about 20m.	
	Km0+330 – Km0+430	The population is crowded on two sides. There is road in both sides. Average ditch width of about 20m. Concrete bridge crosses over the ditch at position Km0+410.	
	Km0+430 – Km0+640	The population is crowded on the left side and sparse on the left side with mixed garden vacant land. There is only road on the right of ditch. Average ditch width of about 18m.	
	Km0+640 – Km0+730	The population is crowded on the right of ditch, there is no road. The left of ditch is mixed garden vacant land and road along ditch. Average ditch width of about 15m. Concrete bridge crossing over the ditch at position Km0+650.	



No.	Route	Characteristics	Illustrative pictures
	Km0+730 – Km0+830	The population is crowded closely in two sides of ditch. There is no road along ditch. Average ditch width of about 12m. Ong Ta bridge crosses over the ditch at position Km0+810.	
	Km0+830 – Km0+870	The population is crowded closely on the right of ditch. The left side is mixed garden vacant land, there is no road. Average ditch width of about 12m.	
	Km0+870 – Km0+960	Two sides of ditch is mixed garden vacant land and has no road along ditch. Average ditch width of about 12m.	
	Km0+960 – Km1+030	The population is crowded closely on the left of ditch. The right side is mainly mixed garden vacant land. Average ditch width of about 10m.	


No.	Route	Characteristics	Illustrative pictures
	Km1+030 – Km1+210	The population is crowded in two sides of ditch, there is no road in two side. Average ditch width of about 8m.	

13. Status of Sao ditch

Status:

- The population is crowded in two sides.
- The local road is 2m wide and landslide at some sections.
- Some households encroaches into the ditch.



No.	Route	Characteristics	Illustrative pictures
Sao ditch (from Binh Thuy river – Tran Quang Dieu intersection)			
	Km0 – Km0+245	At the beginning of route, the population is sparse on the left, mainly mixed garden vacant land, about 20m from ditch is Tran Quang Dieu road along the ditch. Concrete bridge crosses over the ditch at position Km0+040.	
	Km0+245 – Km0+460	The population is crowded in two sides of ditch. The right side has no road. The left side far from the ditch about 20m is Tran Quang Dieu road along the ditch.	




No .	Route	Characteristics	Illustrative pictures
	Km0+460 – Km1+150	The population is crowded on the left of ditch, Tran Quang Dieu road along the ditch and 20m from the ditch. The population is sparse and with mixed garden vacant land on the right side.	

14. Status of Muong Cui ditch

Status:




- The population is crowded in two sides.
- One side of road has been invested under the NUUP project. The rest part of road has been concreted.

No .	Route	Characteristics	Illustrative pictures
Muong Cui ditch (from Nga Bat ditch (3/2) –Nguyen Van Linh road)			
	Km0 – Km0+100	The population is sparse on the left of ditch and interlaced with vacant land and mixed garden. Average ditch width of about 14m. Concrete bridge crosses over the ditch at position Km0+010.	
	Km0+100 – Km0+210	The population is crowded in two sides of ditch. There is road in two sides of ditch. Average ditch width of about 14m.	

No .	Route	Characteristics	Illustrative pictures
	Km0+210 – Km0+280	The left side is mainly mixed garden vacant land. The population is crowded on the right of ditch. There is road in both sides of ditch. Average ditch width of about 14m.	
	Km0+280 – Km0+360	The population is crowded in two sides of ditch. There is road in two side. Average ditch width of about 14m.	
	Km0+360 – Km0+780	The population is crowded on the left side and sparse on the right side and interlaced with mixed garden vacant land. Average ditch width of about 10-14m.	





15. Status of open ditches along National Highway 91.





No .	Route	Characteristics	Illustrative pictures
Open ditch 91 (Bridge No.1 on Nguyen Van Linh road crossing Metro TO Nguyen Hien)			




No .	Route	Characteristics	Illustrative pictures
	Km0 – Km0+210	The population is crowded closely in two side of ditch and back toward the ditch. There is no road along ditch. Average ditch width of about 2m. Culvert crossing over the road at position Km0+080.	
	Km0+210 – Km0+450	Metro supermarket area	
	Km0+450 – Km0+690	The population is crowded in two sides of ditch and back toward the ditch. There is no road along ditch. Culvert crosses over the ditch at position Km0+575 and Km0+680.	

16. Status of Tran Hoang Na road bridge, and parallel road IC3

No .	Route	Characteristics	Illustrative pictures
Tran Hoang Na road bridge, and parallel IC3			
<i>Tran Hoang Na road bridge</i>			





No .	Route	Characteristics	Illustrative pictures
	K0+000 – Km0+250	In the head section, Road 2 in Hong Phat residential area has existing asphalt concrete road with sidewalk, drainage system and some households living in the head of route.	
	Km0+250 – Km0+470	From the end of Road 2 in Hoang Phat residential area to road A3 in 91B residential area, there is no road but mixed garden. The population is sparse near Dau Sau ditch. The road crosses over Dau Sau ditch at position (Km0+570).	
	Km0+470 – Km0+700	There is no road crossing over Dau Sau ditch. The population is crowded in two sides of ditch.	
	Km0+700 – Km1+180	There is existing road A3 in 91B residential area with asphalted pavement, ununiform sidewalk, has lighting system and drainage system. The population is relatively crowded. Houses are mainly 1-2 storey ones.	


No .	Route	Characteristics	Illustrative pictures
	Km1+180 – Km1+385	There is no existing road. The route crosses over Muong Cui ditch at position (Km1+320). On the route is mainly mixed gardens.	
	Km1+385 – Km2+065	There is no existing road crossing Nga Bat ditch (Km1+490), Road 3/2 (Km1+750) and alley 656 (Km2+015). The population is crowded in two sides of road because the road is near road 3/2 and road 30/4.	
	Km2+065 – Km2+880	There is existing Tran Hoang Na road with two-lane asphalted pavement, has drainage and lighting systems. The population is crowded along two sides of road.	
	Km2+880 – Km2+910	Can Tho riverbank has no existing road but yard of building materials.	

No .	Route	Characteristics	Illustrative pictures
	Km2+910 – Km3+150	Can Tho river	
	Km3+150 – Km3+550	From Can Tho riverbank to NH 1a, there is no existing road but vacant land and mixed trees.	
<i>Parellel road IC3</i>			
	Km0+000 – Km1+600	From Tran Hoang Na road to IC3 intersection, there is a concrete road with width of about 6m and several damaged sections. One side of road is NH 1A and other side is vacant land and mixed trees. The road crosses over Cai Da ditch at position (Km1+150).	

17. Status of the road connecting the August Revolution road to provincial road 918

No .	Route	Characteristics	Illustrative pictures
<i>Road connecting August Revolution road to Provincial road 918</i>			

No .	Route	Characteristics	Illustrative pictures
	Km0 – Km0+615	In the head of route, the existing road is asphalt concrete road with several damaged sections, stagnant, lighting system but no drainage system. The population is crowded in two sides of road. In the head section, one household is doing business beverages and eating. The military unit (Km0 + 170).	
	Km0+615 – Km0+905	From end of Alley 91 to Tran Quang Dieu road, there is local road of 3m width and reinforced concrete pavement. The population is quite crowded on the right. The left side is mainly mixed garden, natural elevation varying from +1.3m to +1.4m.	
	Km0+905 – Km1+690	This section begins from Tran Quang Dieu road to Vo Van Kiet road. Along the road is mainly mixed garden with natural elevation from +0.6m to +1.4m, mainly about +0.7m. The population is sparse, mainly concentrating in few positions on route.	
	Km1+690 – Km3+500	The starting point begins from Vo Van Kiet road to Nguyen Van Linh. Along the route is mainly mixed garden and rice fields with natural elevation from +0.7m to +1.9m, mainly about +0.8m. The population is sparse, mainly concentrating from Rach Suc to Nguyen Van Linh road. The route crossing over two small ditches such as 10m Ba Sao ditch and 6m Ranh ditch and one large ditch – Suc ditch of 20m. At section Km2+960, there is high-voltage transmission line crossing over.	

No .	Route	Characteristics	Illustrative pictures
	Km3+500 – Km5+400	<p>The ending point from Nguyen Van Linh road to Long Tuyen prison. There is no existing road but mixed gardens and rice fields with natural elevation from +0.6m to +1.3m, mainly about +0.8m. The population is mainly concentrating near Nguyen Van Linh road and gradually sparse toward the ending point. The volume of impacts on housing is relatively minor. The route crossing over two irrigation canals of about 12m. Nuoc Lanh ditch crosses over the route at 3 positions with the respective ditch width of 21m, 12m and 13m. Near the ending point is Long Tuyen river with width of about 21m.</p>	

Annex 3: Results of the Project Environment Monitoring

Annex4. Proposed Location for Environment Monitoring during Construction and Operation Phase

4.1. Proposed Location for air sample

No.	Code	Sampling position	Sampling coordinates
1	K1	Ngo Duc Ke road intersecting with Hai Ba Trung road	X= 0586130 (m) Y= 1108925 (m)
2	K2	Hung Loi bridge pier crossing Ninh Kieu	X= 0584314 (m) Y= 1107555 (m)
3	K3	End of Tam Vu road	X= 0582790 (m) Y= 1106700 (m)
4	K4	Nga Cai creek intersection with Muong Khai creek	X= 0579910 (m) Y= 1108842 (m)
5	K5	Pho Tho creek	X= 0581009 (m) Y= 1110291 (m)
6	K6	Cai Son bridge pier on Lo Vong Cung road	X= 0581732 (m) Y= 1106428 (m)
7	K7	Under Cai Son bridge pier on Nguyen Van Cu road	X= 0581171 (m) Y= 1107641 (m)
8	K8	Quang Trung bridge on side of Ninh Kieu district	X= 0585366(m) Y= 1108476 (m)
9	K9	Intersection of Xeo Nhum and Dau Sau creeks	X= 0582332 (m) Y= 1108344 (m)
10	K10	Intersection of Ngong and Ba Bo creeks	X= 0582383 (m) Y= 1110755 (m)
11	K11	Rach Ngong 2 bridge on Nguyen Van Cu road	X= 0583473 (m) Y= 1110325 (m)
12	K12	In middle of Muong Cui creek	X= 0582897 (m) Y= 1107911 (m)
13	K13	Intersecting point between Dau Sau and Nga Bat creeks	X= 0582349 (m) Y= 1107435 (m)
14	K14	Iron bridge on Tam Vu road crossing Ba Le creek	X= 0583994 (m) Y= 1106758 (m)
15	K15	Intersection of Ba Bo and Phu Tho creeks	X= 0581237 (m) Y= 1109161 (m)
16	K16	Cai Da bridge pier on Road IC3	X= 0584820 (m) Y= 1106683 (m)
17	K17	Van bridge on Tran Quang Dieu road	X= 0582696 (m) Y= 1112004 (m)
18	K18	Xeo La bridge on Xeo La creek	X= 0583632 (m) Y= 1109601 (m)
19	K19	Alley 91 intersecting with August Revolution road	X= 0583184 (m) Y= 1112750 (m)
20	K20	Concrete bridge to inter-group 8-7-6 alleys on Ong Ta creek	X= 0583016 (m) Y= 1109272 (m)

4.2. Position Location for sampling surface water

No.	Code	Sampling position	Sampling coordinates
1	NM1	Embankment of Ngo Duc Ke road intersecting with Hai Ba Trung road	X= 0586170 (m) Y= 1108928 (m)
2	NM2	Quang Trung bridge on side of Cai Rang district	X= 0585395 (m) Y= 1108200 (m)
3	NM3	Can Tho river bank at the end of Tam Vu road	X= 0584026 (m) Y= 1106699 (m)
4	NM4	Can Tho river bank crossing Cai Rang bridge	X= 0581528 (m) Y= 1106420 (m)
5	NM5	Nga Cai creek intersection with Muong Khai creek	X= 0579933 (m) Y= 1108847 (m)
6	NM6	Under Cai Son bridge pier on Nguyen Van Cu road	X= 0581171 (m) Y= 1107641 (m)
7	NM7	Bridge No.3 on Nguyen Van Linh road crossing Xeo Nhum creek	X= 0582728 (m) Y= 1108611 (m)
8	NM8	Phu Tho canal is about 300m from Ba Bo bridge on Nguyen Van Linh road	X= 0580744 (m) Y= 1110352 (m)
9	NM9	Tu Ho intersecting with Ngong creek	X= 0582932 (m) Y= 1110469 (m)
10	NM10	Iron bridge on Tam Vu road crossing Ba Le creek	X= 0583996 (m) Y= 1106766 (m)
11	NM11	Intersection of Dau Sau and Nga Bat creeks	X= 0582397 (m) Y= 1107439 (m)
12	NM12	Concrete bridge to inter-group 8-7-6 alleys on Ong Ta creek	X= 0583007 (m) Y= 1109271 (m)
13	NM13	Intersection of Ba Bo and Phu Tho creeks	X= 0581258 (m) Y= 1109176 (m)
14	NM14	Xeo La bridge on Xeo La creek	X= 0583622 (m) Y= 1109593 (m)

15	NM15	Van bridge crossing Sao creek (Binh Thuy) on Tran Quang Dieu road	X= 0582696 (m) Y= 1112004 (m)
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4.3. Position Location for sampling underground water

No.	Code	Sampling position	Sampling coordinates
1	NN1	Lam Van Mung, No. 1C, Quang Trung road, Xuan Khanh ward, Ninh Kieu district, Can Tho city, well is about 80m deep (Can Tho embankment).	X = 0585330 (m) Y = 1108497 (m)
2	NN2	Tran Thi Luom, No. 162, Tam Vu road, zone 2, Hung Loi ward, Ninh Kieu district, Can Tho city. Well is about 80m deep (Ba Le creek).	X = 0584003 (m) Y = 1106782 (m)
3	NN3	Vo Van Tao, No. 298, group 4, zone 4, An Khanh ward, Ninh Kieu district, Can Tho city. Well is about 120m deep (Ba Bo creek).	X = 0581653 (m) Y = 1109649 (m)
4	NN4	Nguyen Van Dom, No. 303/12, Binh Nhut A zone, Long Hoa ward, Ninh Kieu district, Can Tho city. Well is about 120m deep (Sao creek – Binh Thuy).	X= 0582696 (m) Y= 1112004 (m)
5	NN5	Vo Thi Yen, No. 174, Long Hoa ward, Binh Thuy district, Can Tho city. Well is about 80m deep (Sao creek – Binh Thuy).	X= 0581760 (m) Y= 1112333 (m)
6	NN6	Phan Thanh Phong, No. 315/9, Zone 4, An Binh ward, Ninh Kieu, Can Tho city. Well is about 120m deep (Cai Son creek).	X = 0581524 (m) Y = 1107534(m)
7	NN7	Le Thi Truc Mai, No. 34/1, Zone 1, An Binh ward, Ninh Kieu, Can Tho city. Well is about 120m deep (Dau Sau creek).	X = 0582535 (m) Y = 1106686 (m)
8	NN8	Do Van Viet, No. 220, Binh Pho B zone, Long Tuyen ward, Binh Thuy district, Can Tho city. Well is 100m deep (Ba Bo creek).	X = 0581087 (m) Y = 1108364 (m)
9	NN9	Chau Thi Que, No. 329 C/11, Nguyen Van Linh road, Zone 3, An Khanh ward, Ninh Kieu district, Can Tho city. Well is about 180m deep (Xeo Nhum).	X= 0582728 (m) Y= 1108611 (m)
10	NN10	Le Thi Cuu, No. 127/8D, Vo Van Kiet road, An Hoa ward, Ninh Kieu district, Can Tho city. Well is about 60m deep (Ngong creek).	X= 0582932 (m) Y= 1110489 (m)

4.4. Position Location for sampling domesticwastewater

No.	Code	Sampling position	Sampling coordinates
1	NT1	Outlet of the fruits and vegetables market to Cai Khe creek	X= 0585465 (m) Y= 1110444 (m)
2	NT2	Outlet at Quang Trung bridge pier (Can Tho embankment)	X= 0585375 (m) Y= 1108200 (m)
3	NT3	Outlet at Tam Vu iron bridge pier (Ba Le creek)	X= 0583987 (m) Y= 1106766 (m)
4	NT4	Outlet at Dau Sau bridge pier on Nguyen Van Cu road	X= 0582131 (m) Y= 1108746 (m)
5	NT5	Outlet at Muong Khai creek, near Gua creek intersection (Muong Khai creek)	X= 0580754 (m) Y= 1107938 (m)
6	NT6	Outlet at Muong Khai creek, about 300m from Pho Tho market (Muong Khai creek)	X= 0580562 (m) Y= 1108250 (m)
7	NT7	Outlet on Suc creek, about 400m from Ba Bo bridge on Nguyen Van Linh road.	X= 0581277 (m) Y= 1110343 (m)
8	NT8	Outlet is about 40m from intersection of Nga Bat creek and Dau Sau creek	X= 0582518 (m) Y= 1107460 (m)
9	NT9	Outlet at Rach Ngong 2 bridge on Nguyen Van Cu road	X= 0582131 (m) Y= 1108746 (m)
10	NT10	Outlet under bridge No.3 on Xeo Nhum creek on Nguyen Van Linh road	X= 0582332 (m) Y= 1108344 (m)
11	NT11	Outlet near Ong Ta bridge (Ong Ta creek)	X= 0583232 (m) Y= 1109192 (m)
12	NT12	Outlet under concrete bridge near intersection of Tu Ho and Ngong creeks	X= 0582932 (m) Y= 1110469 (m)
13	NT13	Outlet under Ba Bo bridge on Nguyen Van Linh road (Ba Bo creek)	X= 0581572 (m) Y= 1109564 (m)
14	NT14	Outlet under Can bridge crossing Sao creek (Binh Thuy) on Tran Quang Dieu road	X= 0582696 (m) Y= 1112004 (m)
15	NT15	Outlet near Xeo La bridge, Xeo La creek	X= 0583631 (m)

			Y= 1109628 (m)
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4.4. Position Location for sampling soil quality

No.	Code	Sampling position	Sampling coordinates
1	D1	Hung Loi bridge pier on side of Ninh Kieu district	X= 0584314 (m) Y= 1107555 (m)
2	D2	Can Tho river bank crossing Cai Rang bridge	X= 0581528 (m) Y= 1106420 (m)
3	D3	Intersection of Nga Cai – Muong Khai creeks	X= 0579910 (m) Y= 1108842 (m)
4	D4	End of alleys 234	X= 0581638 (m) Y= 1107868 (m)
5	D5	Quang Trung bridge on side of Ninh Kieu district	X= 0585366(m) Y= 1108476 (m)
6	D6	In middle of Muong Cui creek	X= 0582897 (m) Y= 1107911 (m)
7	D7	Near Xeo La bridge on Xeo La creek	X= 0583632 (m) Y= 1109601 (m)
8	D8	Intersection of Ngong and Ba Bo creeks	X= 0582383 (m) Y= 1110755 (m)
9	D9	Near Ba Bo bridge on Nguyen Van Linh road	X= 0581571 (m) Y= 1109574 (m)
10	D10	Van bridge on Tran Quang Dieu road	X= 0582696 (m) Y= 1112004 (m)

4.4. Position Location for sampling sediment quality

No.	Code	Sampling position	Sampling coordinates
1	B1	Embankment on Ngo Ke Duc intersecting with Hai Ba Trung road	X= 0586170 (m) Y= 1108928 (m)
2	B2	Quang Trung bridge on side of Cai Rang district	X= 0585395 (m)

			Y= 1108200 (m)
3	B3	Can Tho river bank at the end of Tam Vu road	X= 0584026 (m) Y= 1106699 (m)
4	B4	Can Tho river bank crossing Cai Rang bridge	X= 0581528 (m) Y= 1106420 (m)
5	B5	Iron bridge on Tam Vu road crossing Ba Le creek	X= 0583996 (m) Y= 1106766 (m)
6	B6	Under Cai Son bridge pier on Nguyen Van Cu road	X= 0581171 (m) Y= 1107641 (m)
7	B7	Intersection of Muong Khai and Pho Tho creeks	X= 0579449 (m) Y= 1109003 (m)
8	B8	Intersection of Ba Bo and Phu Tho creeks	X= 0581258 (m) Y= 1109176 (m)
9	B9	Concrete bridge to inter-group 8-7-6 alleys on Ong Ta creek	X= 0583007 (m) Y= 1109271 (m)
10	B10	Concrete bridge in middle of Muong Cui creek	X= 0582897 (m) Y= 1107911 (m)
11	B11	Bridge pier crossing Tu Ho creek on Nguyen Tri Phuong road	X= 0582945 (m) Y= 1109827 (m)
12	B12	Suc creek is 400m from Ba Bo bridge on Nguyen Van Linh road	X= 0581277 (m) Y= 1110343 (m)
13	B13	Iron bridge at the end of Sao creek intersecting with Suc creek	X= 0581760 (m) Y= 1112333 (m)
14	B14	Intersection of Ngong and Ba Bo creeks	X= 0582383 (m) Y= 1110755 (m)
15	B15	Xeo La bridge on Xeo La creek	X= 0583622 (m) Y= 1109593 (m)

Annex 5: Minutes of Public Consultation and Site Pictures

 1. An Binh ward.pdf	 2. An Cu ward.pdf	 3. An Hoa ward.pdf	 4. An Hoi ward.pdf	 5. An Khanh ward.pdf
 6. An Lac ward.pdf	 7. An Nghiep ward.pdf	 8. An Phu ward.pdf	 9. An Thoi ward.pdf	 10. Cai Khe ward.pdf
 11. Hung Loi ward.pdf	 12. Hung Phu ward.pdf	 13. Hung Thanh ward.pdf	 14. Le Binh ward.pdf	 15. Long Hoa ward.pdf
 16. Long Tuyen ward.pdf	 17. Phu Thu ward.pdf	 18. Tan An ward.pdf	 19. Thoi Hoa ward.pdf	 20. Xuan Khanh ward.pdf

* **Note:** double click into the icon to open the file.

Annex 6: Social Assessment Report

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Executive Summary

Can Tho Urban Development and Resilience Enhancement Project is funded by the World Bank. The objective of the Project is to develop urban transport infrastructure in combination with flood control; secure city-level agencies and facilities, region-level bodies (institutes, universities, hospitals...) and concentrated living areas; strengthen local transport links and those between areas in the city in order to ensure conditions of work, study and investment for sustainable socio-economic development; develop public transport systems and enhance the accessibility of the people in low-income areas to the social infrastructure service of the city, reducing travel time between the city center area and development areas with low flood risk to promote growth, build works synchronously to control and mitigate flooding and increase drainage capacity and improve environmental sanitation in combination with urban embellishment and enhance living conditions in urban areas.

Project includes 03 components, in which Component 1 – Flooding control and environmental sanitation; Component 2 - Urban corridor development and Component 3 - Strengthening urban management for climate change resilience. Can Tho CPC assigned ODA-PMU of Can Tho city to manage, organize and implement project preparation activities, including preparation PDO, FS, safeguard policy reports according to the Donor's requirements.

The Project will generate positive impacts during the operational phase such as : (i) Improved public health and living conditions in the project area, especially for poor and low income households encroaching on the Can Tho River's banks and households located in areas adjacent to existing open channels and drains and lakes with heavy pollution; (ii) Minimized flooding for households and commercial areas along two Can Tho riversides; (iii) Safety issues along two river banks is secured; (iv) Increased income in the construction phase; (v) increased opportunities for commerce, tourism, local recreation and exercise; (vii) Improved access to markets and primary social services (health, education) and urban employment opportunities (viii) Reduced flooding because the drainage system is improved; (ix) Increased income from production and marketing of agricultural products (x) Increased efficiency of production and consumption of goods due to better market accessibilities (xi) The flooding, inundation and bad smell will disappear in the city through flood control works, drainage systems under the project.

Despite of the overall positive impacts, the project will cause some adverse social impact which are inevitable. The project will have significant impacts on land acquisition and resettlement: 4,539 households will be affected of which 1,814 will be relocated, 1,354,055 m² of land will be acquired (361,936 m² (26.8%) of residential and 735,736 m² (54.4%) of agricultural land). Impacts on livelihoods (agriculture production and small business to be relocated) will also be significant, A Resettlement Plan and an income restoration plans were prepared to mitigate these impacts.

Other potential social impacts on local communities include road and public safety during construction, spreading of HIV/AIDS during the construction period and disruption of communities and livelihoods during site clearance and construction. The SA also highlighted that women are more vulnerable to hardship due to loss of economic and social base due to land acquisition, relocation and loss of livelihood. As part of the SA, a Gender Action Plan was prepared.

The social assessment (SA) was conducted to examine the potential impact of the project (both positive and negative). This Social Assessment Report is prepared aiming to: (i) identify

potential direct economic and social impacts and those associated impacts that occur near the project or area of influence that result from the Bank assisted investment project; (ii) provide social inputs obtained through consultations with local people and included or integrated into preparation of the project feasibility study that in particular paid much attention to demands of the affected community; (iii) provide specific recommendations on the participatory approached management for high social risk infrastructure investments, then define criteria and methodology for determining whether or not proposing investments are accepted by the community; and (iv) provide baseline data for project monitoring and evaluation.

As part of the SA, a Social Action Plan (SAP) was prepared to ensure that social benefits are maximized and adverse impacts are mitigated, if not avoided. The SAP also includes gender mainstreaming.

CHAPTER I: INTRODUCTION

1.1. Background

According to the World Bank's assessment, Vietnam is one of 05 countries around the world severely affected by climate change and sea level rise, in which Can Tho city in particular and the Mekong Delta region in general are forecasted to be most severely affected by the negative impacts of climate change. The fact shows that flooding is now a pressing problem. Flooding caused by rains, tide, floods and ground subsidence has been occurring regularly in Can Tho city, which increases the risks of landslides and generation of several epidemics and causes significant impacts on the lives of people and damages to infrastructures. In Can Tho city, there are many rivers, canals and creeks, therefore, in case of heavy rains in combination with tide, the city will become rapidly flooded in longer period.

The process of spontaneous/uncontrolled urbanization and immigration in Can Tho city led to illegal encroachment on the canals and creeks for the purposes of residence of many households. Furthermore, the disordered garbage discharge and sediment have narrowed flow and reduced the drainage capacity of canals and creeks, leading to environmental pollution and affected urban landscape, and putting pressure on the infrastructure of the city. Those impacts associated with sea level rise, unusual heavy rains, ground subsidence make flooding more severe in Can Tho city. In addition, according to the census of 2009 (WB's calculations are done by the consumption-based approach), 12% of the population of Can Tho city is poor households and 31% of the population falls into low-income group of the country. The poor and low income households living along rivers, canals and creeks are likely to be vulnerable from natural disasters and changes in economic conditions. On the other hand, the development of industry, trade and services will require great demands on labour, increasing flow of means of transport, especially roads linking industrial zones and head ports, traffic routes linking surrounding provinces with the central area which has service building, leading to overload of the existing traffic infrastructure.

Two Urban Upgrading Projects funded by WB on progress in Can Tho city have been improving and upgrading some canals and lakes in the urban areas. However, there are still a lot of canals that need to be improved and upgraded. In addition to finding "soft" solutions to adapt to climate change and living with floods for the purpose of socio-economic development, there should be structure measures to fight and minimize potential negative impacts in the future due to climate change and help poor households in case of negative changes in nature.

When the CTUDR is implemented, it will meet full compulsory criteria of WB on hunger eradication and poverty reduction, improvement of living standards for low-income residents and the GoV's Comprehensive Strategy on Growth and Hunger Eradication and Poverty Reduction. Simultaneously, the project's outcome is one of importance actions defined for climate change resilience of Can Tho city and the Mekong delta region.

1.2. Purpose and objectives of the SA

1.2.1 Objectives of social assessment

Social problems arise largely due to conflict between economic development and natural resources. Economic losses and social costs from environment degradation often occur long after economic benefit of development have been realized. Most often, the development project provide economic benefit and better living environment, but they also affect local people adversely. Therefore, social assessment help in understanding, minimizing and addressing such impacts. It involves in (i) processes through which the World bank and Can Tho City People's Committee can better understand how socio-cultural, institutional, historical and political contexts influence the social

development outcomes of the specific project proposed investments; (ii) enhancing equity, strengthen social inclusion and cohesion, promote transparency and empower the poor and the vulnerable in the project design and/or implementation of the project; (iii) creating mechanisms to identify the opportunities, constraints, impacts and social risks associated with the proposed project design; (iv) setting up a framework for dialogue on development priorities among social group, civil society, grassroots organizations and other stakeholders involved in the project; and (v) approach to identify and mitigate the potential social risks, including adverse social impacts, of the Can Tho Urban Development and Resilience (CTUDR).

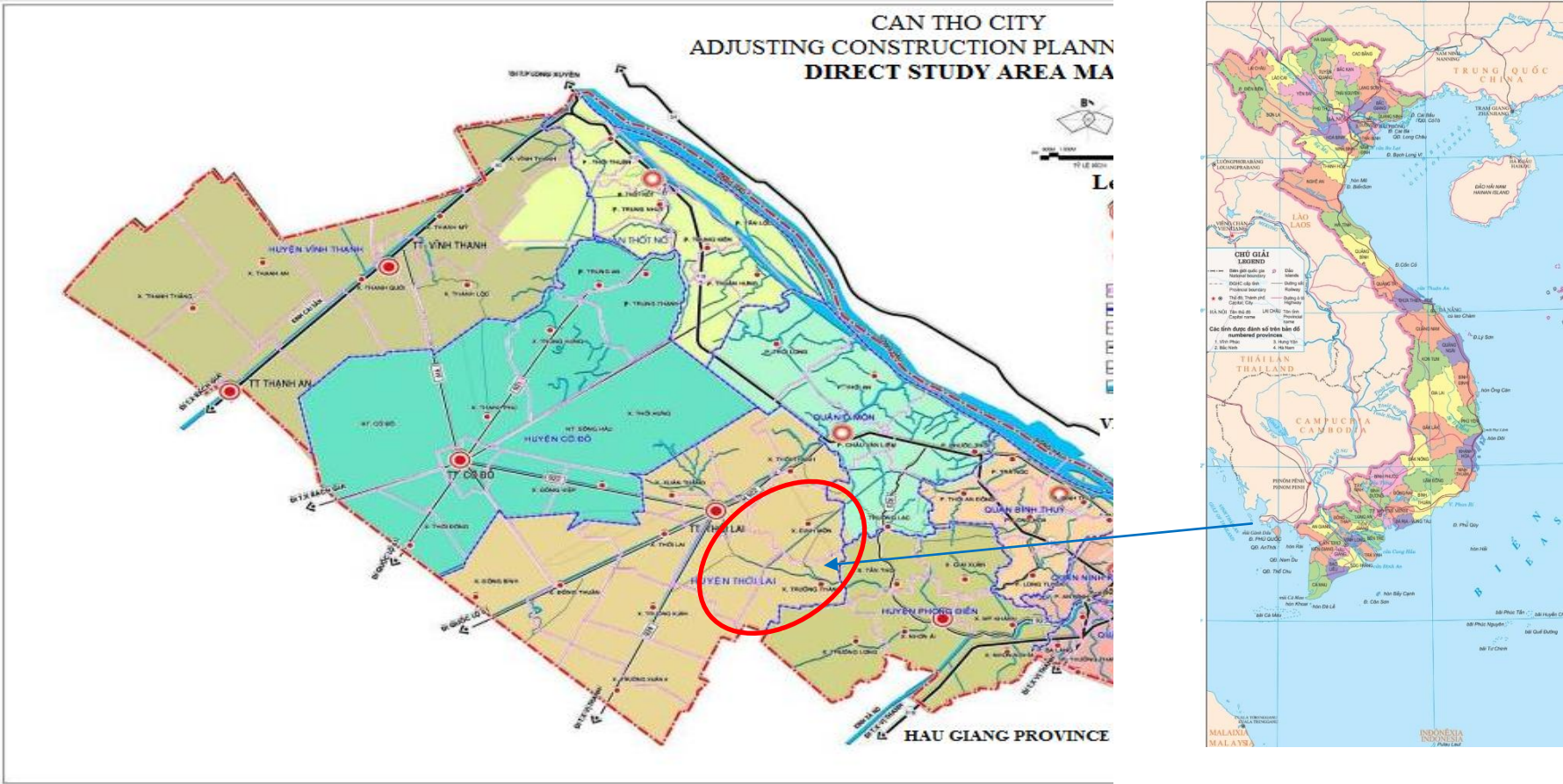
In the project context, the social assessment covers the social aspects of the project planning and design to address appropriately both potential positive and negative impact of the project's activities. It is related to key social issues, including land acquisition, involuntary resettlement, gender, indigenous peoples, public health, public consultation, participation and communication. This task is expected to be carried out in a coordinated manner with the environmental assessment and planning aspects which will be done under a separate assignment. These assessment can enable the World bank and Can Tho City to not only identify social impacts, but also to put in place suitable institutional, organizational and project specific mechanisms to mitigate the adverse effects. It also bright about greater social issue inclusion and participation in the design and implementation stages of the project.

The assignment will comply with relevant laws and policies of the Government of Vietnam and the relevant safeguard policies of the World Bank. Besides that, based on results of SA the project will develop Resettlement Policy Framework (RPF).

1.2.2 The Project Area of Influence

The project is implemented in 3 districts of Can Tho City including NinhKieu, BinhThuy and Cai Rang. The layout of the project area is presented in the map below:

Figure 1.1. Location of Project Area



1.2.3.1. Screening

On the basis of the documents provided, the first project screening included the project context's analysis, identification of stakeholders and their performances. It involved informing about the project investments and potential alternatives, conducting preliminary field surveys to determine location of proposed subprojects, and the scope of impacts (e.g. land acquisition, needs/requirements for ancillary facilities).

Consultant worked with representatives of the PMU, the Provincial Ethnic Committee, the Site Clearance and Land Fund Development Center (LFDC) to gather information, for the preliminary determination of the number of affected/benefitted households, the scope of land acquisition and its legacy issues, affected/benefitted ethnic minority and other vulnerable groups. The data collected in the field survey served to define public consultations and households (socio-economic) survey to affected/benefitted households at the selected project's areas.

1.2.3.2. General principles of information collected

The field survey team collected information with 2 main forms, including (i) collection of available information at the locality through provision of forms and sheets for the authorities of the project wards/communes; (ii) using scientific social methods for collecting socio-economic information in the project area.

Survey process

After surveying the project wards/communes, the field survey team leader prepared methods of collecting information, processing information during the field survey. The preparation of detailed survey plan made the survey more effective. Besides, before conducting the field survey, the field survey team met, discussed and took part in the training course of surveyors. Thereby, the survey team members were introduced about the project, methods and contents of the survey as well as raised awareness of the roles, responsibilities and tasks of the PMU's staff in preparing and implementation at site.

Secondary information collection:

Secondary information sources are used such as Statistical Yearbook of Can Tho, Mekong Delta, socio-economic reports of Can Tho city, socio-economic reports of wards/communes in the project area for collection and evaluation

Socio-economic Survey and Sampling Size

Random stratified sampling method used with the sample size expected to be conducted in all wards/communes in the project area of at least 5% of total households in the wards (For affected residential areas/groups, the number of households to be surveyed will be larger than other areas/groups in the wards).

In-depth interviews:

Methodology for surveying includes formal and informal interviews, in-depth interviews with selected persons, beneficiaries to collect comments and expectations of the people in the project area, thereby giving measures for dealing with potential conflicts and minimizing the adverse impacts.

Group discussions:

Group discussions, focused group discussions on the issues related to living conditions, employment, access to infrastructure, public services, healthcare, transportation, climate change... conducted to

collect information and establish further discussion of the issues involved. Comments and suggestions from the authorities and communities to the project will be listened and collected.

1.2.3.3 Organization for collecting information

Secondary information collection

Household survey by questionnaire:

This survey is a sample survey. The survey aims at collecting socio-economic information of the wards/communes in the project. These households are likely to be affected, are poor and vulnerable households, ethnic minority groups, affected by gender, climate change. The original socio-economic survey data from the affected communities and beneficiaries from the project will be used to assess the project in the future in order to identify whether the project objectives have been met. The original database is also used to monitor the implementation of the project activities and social changes that the project may bring.

In addition to the socio-economic aspects of the sample population and groups of beneficiaries, it is necessary to survey information on the accessibility to public services, utility services and markets. The Consulting Unit will prepare socio-economic effectiveness indicators for covering initial scope of the survey and establish a questionnaire design guideline.

Persons to be surveyed include:

- Local authorities: Representatives of departments and sectors in the project area in the districts, wards/communes.
- Households: Beneficiaries, vulnerable households, ethnic minority households, households at risk of being affected by the project, households with different living standards...

The socio-economic survey was carried out from 13 June to 21 June for **3,425 households** through questionnaire at 20 wards of 4 the project districts.

Table 1.1: Survey sampling size

<i>No.</i>	<i>Districts</i>	<i>Wards</i>	<i>No. of surveyed households</i>	<i>Wards</i>	<i>No. of surveyed households</i>
1	NinhKie	CaiKh e	200	An Nghiep	140
		An Cu	158	An Hoi	95
		An Khanh	233	An Hoa	306
		Tan An	100	An Phu	118
		An Lac	144	Xuan Khanh	193
		An Binh	203	Hung Loi	174

2	Cai Rang	Phu Thu	120	Hung Thanh	156
		Le Binh	200	Hung Phu	201
3	BinhThu y	An Thoi	199	Long Hoa	200
		Long Tuyen	180		
4	O Mon district	Thoi Hoa	117		
Total			3,425		

(Source: Socio-economic survey, June 2015)

1.3. Project description

1.3.1. Overall objectives of the Project

The objectives of the project are to reduce damages caused by flooding in center of Can Tho city and improvement of links between city center and new development areas of Cai Rang. These objectives will be achieved through: (i) investment in structure and non-structure flood risk management; (ii) investment in improvement of urban accessibility, including public transport activities through integrated corridor management approach; and (iii) enhancement of financial and accounting management capacity integrating transport with land use.

Specific objectives of the Project

- To develop urban transport infrastructure in combination with flood control; secure city-level agencies and facilities, region-level bodies (institutes, universities, hospitals...) and concentrated living areas; strengthen local transport links and those between areas in the city in order to ensure conditions of work, study and investment for sustainable socio-economic development; develop public transport systems and enhance the accessibility of the people in low-income areas to the social infrastructure service of the city, reducing travel time between the city center area and development areas with low flood risk to promote growth.
- To build works synchronously to control and mitigate flooding and increase drainage capacity and improve environmental sanitation in combination with urban embellishment and enhance living conditions in urban areas.
- To build capacity for urban management and general management of public administration including: Preparation of flood and risk control plans, transportation and land use plans, mechanisms for coordination, management of disaster risks and finance. Ensure uniform, effective management for the operation of the project after its formation; simultaneously, perform administrative reforms effectively and improve the investment environment.

1.3.2. Components of the project

The CTUDR is a multi-sector project with various structures such as highways, flood control systems, drains, technical infrastructure, social welfare structures and infrastructure in the resettlement sites and so on. The proposals of construction methods and technologies will be based on category of specific structure, specifications, construction conditions and requirements. The

designing and construction organization shall comply with the applicable Vietnamese standards, regulations and codes of construction.

Based on the current situation, objectives and principles of project development, and beneficiaries, the proposed components of the project include:

Component 1 – Flooding control and environmental sanitation

Component 1.1: Flood control system

- Embankment for Can Tho river (section from Ngo DucKe road to Cai Son creek) with a length of about 5.5km;
- Relocation for households occupying and suffering pollution from Can Tho river, upgrading and rehabilitation of road behind embankment;
- Construction of valves/tide drains (with or without locks), drainage pumping system (if necessary) for the center area;
- Rehabilitation of the main canals/ditches in the center area, dredging, upgrading and improvement of protective embankment, road, relocation of households occupying canals/ditches, supplement of reservoirs for rapid water regulation, anti-flooding in BinhThuy district, supplement of synchronous connection of canals, creeks, lake for 2 urban upgrading projects which was implemented with new systems;
- Anti-landslide embankment for O Mon River, renovation of the Ranh ditch and irrigation canal in Cai Rang district on the basis of urgency for travel safety of the people and improvement of environmental sanitation.

Component 1.2: Environmental sanitation

- Rehabilitation and synchronous supplement of the drainage system connecting the collection system in NinhKieu center area (length of about 11 km) and about 10km in the remaining areas;
- Construction of sludge treatment zone in Cai Rang district with a capacity of 150 m³/day-night to treat residual sludge from the wastewater treatment system and sludge dredged from the culverts;
- Equipment serving the works and equipment supporting the management and operation, regulating and monitoring of the drainage system, dredging of culverts, ditches, pumping stations, lakes and control valves.

Component 2 - Urban corridor development

- ***QuangTrung bridge (2nd Unit)***: Construction of QuangTrung bridge (2nd unit) from NinhKieu to Cai Rang with a total length of about 869m, the bridge is 481m long, 11m wide
- ***Tran Hoang Na road and bridge***: Total length of route of about 3.794km, of which
 - Road: Improving and upgrading of road in length of about 1.6km, with 20m and 28m lines; Newly building of 1.6km length, 20m and 28m lines;
 - Bridge: Length of about 549m, width of about 21m crossing Can ThoRiver.
 - In addition, further investment in the parallel road in National Highway 1A (section from Tran Hoang Na to the intersection IC3) in length of about 1.6km and 12m line.

- ***The August Revolution Road (National Highway 91) and provincial road DT918:*** with a total of 5.3 km, building line of 40m
- Construction of a resettlement area: In NinhKieu district covering an area of about 40 hectares, ensuring appropriate planning of technical and social infrastructure and facilitate living conditions for local people
- ***Work associated equipment serving project's operation and management, including:*** (i) Establishment of GIS centers; (ii) Street devices, bus-stop facilities

1.3.3 Component 3 - Strengthening urban management for climate change resilience

- Management of disaster risks and climate change resilience;
- Transportation management and urban development;
- Financial plan of the city;
- Technology application in urban management.

CHAPTER II: SOCIOECONOMIC CHARACTERISTICS

2.1. Overview of Can Tho city

2.1.1. Natural and Socio-economic Conditions

Can Tho City is located in the center of the Mekong river delta region, stretching over 55km along the Western bank of the Hau river, a total natural area of 1,401.61 km², accounting for 3.49% of the entire area. Can Tho city has no natural forest and 75 km from the Eastern Sea. The distance to other municipalities in the region are as follows: 60km away from Long Xuyen, 116km away from Rach Gia, 179km away from Ca Mau and 169km away from Ho Chi Minh city.

Geographical coordinates: 105°13'38" to 105°50'35" East longitude; 09°55'08" to 10°19'38" northern latitude with 4 following adjacent regions:

- Its West borders An Giang province.
- Its South borders Hau Giang province.
- Its Southwest borders Kien Giang province.
- Its East borders Vinh Long and Dong Thap.

Topographical characteristics

Can Tho City lies in the alluvial land deposited from the Mekong River for many millennia and now continue to be deposited regularly over alluvial water source of the Hau River.

The average altitude is about 1.00 – 2.00m sloped from the cultivation land along the Hau river, Can Tho river, lower toward the infield (from Northeast to Southwest). Due to being located near the big river, Can Tho city has a thick network of rivers, canals and ditches. Besides, the city also has the dunes and islands on the Hau River as Au dune, Khuong dune, Son dune and Tan Lap Island.

Socio-economic conditions

Total gross domestic product in the locality (GDP- comparative price in 2010) is estimated at 69,514.7 billion dong, an increase of 12.05% compared with 2013¹, which meets the plan as set forth. The economic structure continues to shift in the right direction of increasing the density of Zones II and III, accounting for 92.73 %; gradually reducing the density of Zone I, accounting for 7.27% in the economic structure of the city, especially the quality is improved when all three areas grow compared to the same period².

Thanks to sustaining of economic growth rate, incomes have been increased and living standards of the people have been improved. Per capita GDP is estimated at 70.2 million dong, an increase of 7.1 million dong compared with 2013³, which meets the plan as set forth. It is equivalent to US.\$ 3,298, an increase of US.\$ 294 compared with 2013.

Industry and construction

The city focused on directing to address difficulties in production and implementation of development supporting measures and timely solve suggestions and proposals for businesses, particularly the exporting businesses, contributing to enhancing competitiveness and promoting production

¹The Plan 2014 has an increase of 12-12.5%, implementation result of 2013 had an increase of 11.32%;

²Zone I has an increase of 0.95%; Zone II has an increase of 10.51%, Zone III has an increase of 14.85%. In the GDP structure, Zone I accounts for 7.27%, Zone II accounts for 35.79% and Zone III accounts for 56.94%.

³ Per capita GDP (current price) reaches 70-70.5 million dong, equivalent to US.\$ 3,280 – 3,330;

appropriately under the current situation. The results of industrial production continued to develop in a positive direction, the index of industrial production is estimated to increase by 8.4% compared to 2013⁴. The industrial parks attracted 05 projects with a total registered investment capital of US.\$ 48 million. Up to now, the industrial parks have 214 projects in force⁵, employ 567.19 ha of industrial land with a total registered investment capital of US.\$ 1,919 million, implementation capital of US. \$ 852.4 million, accounting for 44.4% of total registered investment capital. A total of 31,716 employees working at the industrial parks, a reduction of 803 employees.

Agriculture – Forestry and Aquaculture

Continue to develop for expanding the large field model, strengthen the use of special rice varieties, improving quality and value; forming the link from production to consumption, and improve efficiency and stability of production. The situation of rice production all year is good. Area of sown rice all year is 232,335 ha⁶, exceeding the target by 6.7%, accounting for 98.2% over the previous year. The yield of year is estimated at 1,423 million tons⁷, exceeding the target by 13%, an increase of 3.9% over the previous year. Closely monitoring the cattle-breeding carries out the regular and periodical vaccination, control epidemic for cattle and poultry. The survey results showed that there has no epidemic in the locality. Develop the aquaculture according to the food hygiene and safety standards such as Global GAP, VietGAP, etc. to increase value of goods. It is estimated that area of aquaculture all year is 13,190 ha, exceeding the target by 1.5%, an increase of 2.5% over the previous year. Total output of seafood from breeding is estimated at 193,316 tons, exceeding the target by 4.5%, an increase of 6.7% over the previous year⁸.

Trading – Services

Domestic trade activity continued vibrant, besides the appropriate solutions and policies of the Government, the city celebrated many activities to support businesses to promote trade, connect supply and demand between producers - distributors, exhibitions, the program “bring Vietnamese products to suburbs”, etc. in combination with the forms of promotion, attractive marketing of businesses, supermarkets and utility stores, encouraging consumption and increasing purchasing power in end months of year, promoting production, market development so that Can Tho city becomes a trading center of the Mekong delta region.

Population – Labor

Currently, the city is mobilizing sources to complete the technical and social infrastructure to ensure the city’s development in prevailing and in the future to deserve being one of five cities directly under the Central government.

Up to 2010, Can Tho city has a total of 09 administrative units, including 5 urban districts of NinhKieu, O Mon, BinhThuy, Cai Rang and Thot Not and 04 rural districts including Vinh Thanh, Co Do, PhongDien and Thoi Lai. Scale, area and population of these districts are shown in the table belloved:

⁴ The processing industry has an increase of 9.13%, production and distribution of power energy has an increase of 75.88%; water supply, waste management and treatment increase 14.59%.

⁵ There are 192 on progress, 16 projects under the construction and 06 outstanding projects.

⁶Of which, area of sowing Winter-Spring rice is 88,007.9 ha, exceeding the target by 0.2%, area of sowing Summer-Autumn rice is 81,088.5 ha, exceeding the target by 1.4%; area of sowing Autumn-Winter rice is 63,238.6 ha, exceeding the target by 26.5%.

⁷Of which, the output of Winter-Spring rice is 646,129 tons, exceeding the target by 1.4%; output of Summer-Autumn rice is 455,460 tons, exceeding the target by 10.5%, output of Autumn-Winter rice is 322,010 tons, exceeding the target by 52.8%.

⁸ Of which, area of breeding Pangasius catfish is 842 ha, reaching 99.1%, equivalent to 98.4% compared with the previous year. The output is 150,444 tons, exceeding the target by 0.3%, an increase of 5.9% over the pervious year.

Table 2.1: Scale, area, population and population density of Can Tho city

No.	Districts	Area (km ²)	Population (people)			Population density (person/km ²)
			Total	Male	Female	
1	NinhKieu	29.27	1.232.260	122.533	133.195	8,737
2	O Mon	132.22	133.630	67.238	67.392	1.018
3	BinhThuy	70.68	119.158	58.959	60.199	1.686
4	Cai Rang	68.33	91.000	44.667	46.333	1.332
5	Thot Not	118.01	164.980	82.662	82.278	1.398
6	Vinh Thanh	298.23	116.110	58.392	57.718	389
7	Co Do	311.15	126.069	64.330	61.739	405
8	Phong Dien	125.26	101.120	50.330	50.790	807
9	Thoi Lai	255.81	123.505	63.015	60.490	483
TOTAL		1.408		1.232.260		875

(Source: Statistic Year Book of Can Tho city – 2014)

Can Tho city has several ethnic communities living as same as other multi-ethnic integration areas. According to statistic data to the end of 2009, major ethnic group living in the city is Kinh with 1,153,341 people, accounting for 96.96%, Hoa Kieu ethnic group accounts for 1.19%, Khmer ethnic group accounts for 1.8% and other ethnic groups account for 0.05%.

These ethnic groups are urbanized and integrated into the urban mainstream way of life. However, according to table 2.2. the ratio of near –poor and poor of ethnic minority HH is higher than Kinh HH in Can Tho city.

Table2.2: No. of near-poor households by ethnicity

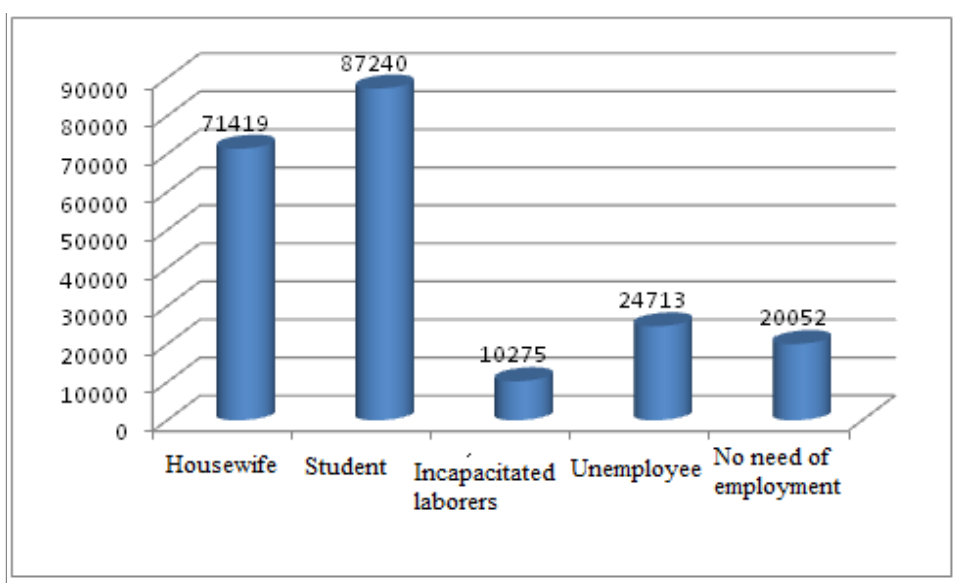
o.	Di stricts	Total population of city	No. of near-poor and poor HHs				Poor and Near-poor ethnic minority (EM) HHs				
			No. of poor HHs	ate R	No. of near- poor HHs	ate R	M Hs*	Po or EM HHs	ate %	Near- poor EM HHs	ate %
	Ni nhKieu	64,55 3	682	1 .06	551	0 .85	2 .518	64	2 .54	47	1 .87
	O Mon	33,08 6	1,5 47	4 .68	141 3	4 .27	1 .272	20 6	1 6.19	104	8 .18
	Bi nhThuy	31,11 2	175	0 .56	497	1 .6	4 66	3	0 .64	13	2 .79
	Ca i Rang	23,56 4	278	1 .18	566	2 .4	5 30	11	2 .08	32	6 .04
	Th ot Not	39,32 2	1,0 35	2 .63	966	2 .53	3 48	31	8 .91	14	4 .02
	Vi nh Thanh	27,42 9	838	3 .06	138 9	5 .06	3 65	43	1 1.78	95	2 6.3
	Co Do	29,51 8	1,6 99	5 .76	191 1	6 .47	2 .18	38 3	1 7.57	352	1 6.2
	Ph ongDien	25,03 5	840	3 .36	972	3 .88	3 49	23	6 .59	27	7 .74

o.	Districts	Total population of city	No. of near-poor and poor HHs				Poor and Near-poor ethnic minority (EM) HHs				
			No. of poor HHs	Rate %	No. of near-poor HHs	Rate %	Minority HHs*	Poor or EM HHs	Rate %	Near-poor EM HHs	Rate %
	Thoi Lai	29,890	1,528	5.11	1554	5.2	934	113	12.1	91	9.74
CAN THO CITY		30,3509	8,622	28.4	9,849	32.5	336	877	29.9	775	28.65

❖ Labor and occupations

Total laborers are 864,041 people, including 650,342 laborers working in the economic sector, and 213,699 persons not working (students, unemployed, housewife etc.) (See Figure 1). Number of laborers working in the primary sector is 260,418 persons (including 250,545 laborers working in the agriculture and forestry sector and 9,873 laborers working in the fishery sector). Number of laborers working in the industry and service sectors is 127,593 people (including 264 laborers working in the mining industry sector, 83,669 laborers working in the processing industry sector, 4,571 laborers working in electricity and water sector and 39,089 laborers working in construction sector, 144,821 laborers working in trade and industry, hotel, restaurant; 32,811 laborers working in transport, warehouse, communication sectors and 84,699 laborers working in other sectors).

Figure 1 : Non-Working Population in Can Tho city



❖ Poverty

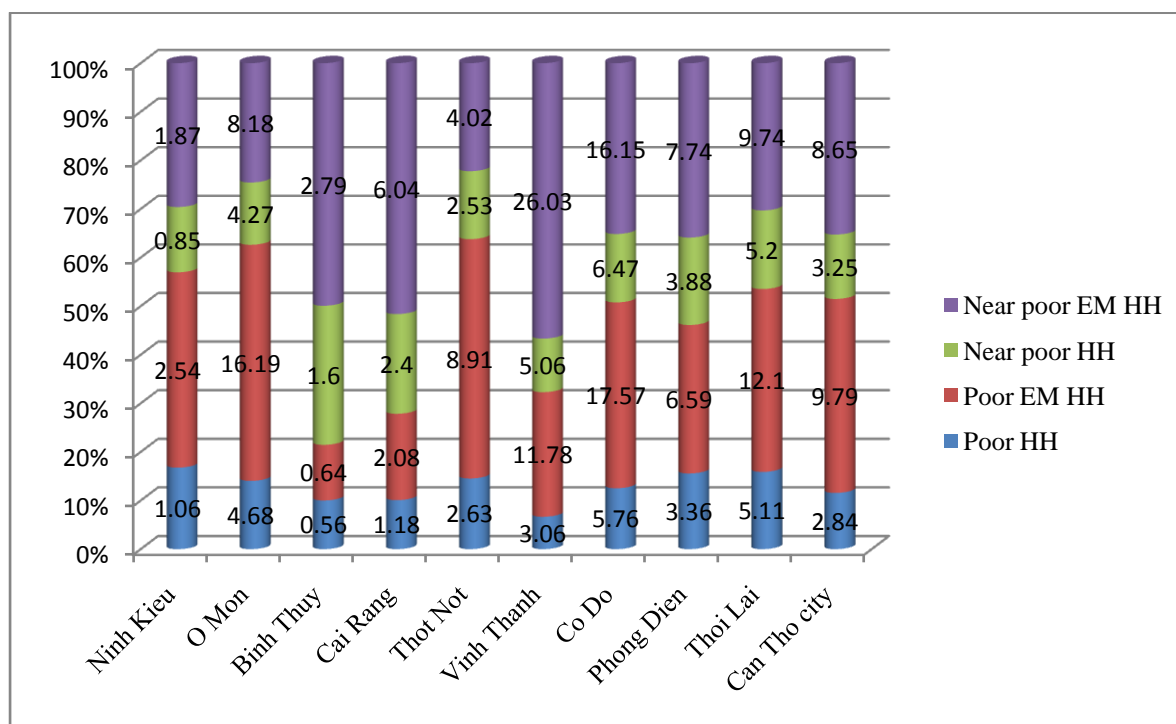
According to the report of the first 9 months of 2015 done by the city DOLISA, it shows poverty rates and near-poor rates to gradually reduce annually. In 2012, the city had 19,530 poor households, accounting for 6.62% and 15,921 near-poor households with 5.39%. These numbers have declined over the years and by 2014, the number of poor households citywide remains 11,867 HHs (3.95%) and near poor households is 11,692 HHs (3.89%), which decreases by 50% over 3 consecutive years of 2012 to 2014 (Table 3.3).

Table 2.3. Poverty rate of Can Tho city

No	Year	Poverty rate		Percentage Near Poor	
		HHs	Percentage %	HHs	Percentage %
	2012	19.530	6,62	15.921	5,39
	2013	15.465	5,19	14.282	4,79
	2014	11.867	3,95	11.692	3,89

(Source: Department of Labour, Invalids, Social of Can Tho city - September 2015)

Figure 2: Ratio of near-poor and poor households accordingly ethnic minority



2.1.2. Infrastructure Conditions

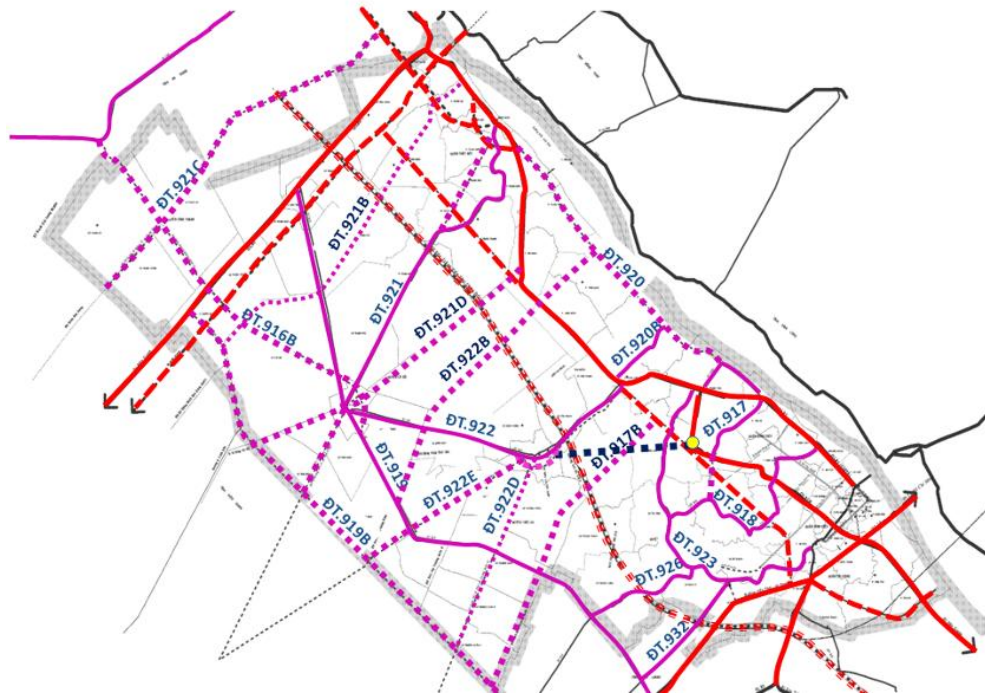
Transport Connectivity

Highway: The city has 2,762.84 km of highways with the density of 2.3km/km² (if excluding commune/hamlet roads, the city has 698,548km of roads with the density of 0.5km/km²), including 123.715km of national highways, 183.85km of provincial roads, 332.87km of district roads, 153.33km of urban roads, 1,969.075km of hamlet/commune/group roads. There are 3.98% of hot concrete road pavement, 26.26% of asphalt road pavement, 27.74% of stone-spread pavement, 17.44% of aggregate pavement and the rest of earth road which is mainly used by pedestrians and two-wheel vehicles with the minor scale and load.

The river transport system: The waterway network has a total length of 1,157km, including 619km is usable for means of 30 tonnes or more (average depth greater than 2.5m). The waterway network consists of 6 routes managed by the Central authorities (as Hau river, Can Tho river, Cai San canal, Thi Doi canal, O Mon creek and Xa No canal) with total length of 132.88km, which ensures operations of the transportation means with load from 100 to 250 tonnes. There are 4 river transport routes managed by the city including: Thot Not canal, Ba Dam canal, Cau Nhim creek and Ba Lang creek with a total length of 81.45km, which ensures operations of transportation means with load from 30 to 50 tonnes. The river transport network managed by the district consists of 40 routes with a total length of 405.05km, which ensures operations of the transportation means with load from 15 to 60 tonnes.

Airway transport: Can Tho airport is the biggest one in the Mekong delta region and officially operated with national flights since 03 January 2009 and international flights since the end of 2010

Transport status of Can Tho City



The traffic serving works: Can Tho bridge crossing the Hau river was commenced since September 2004 and operated since 24 April 2010. Besides the system of ports of Can Tho city under the process of upgrading include Can Tho port (Hoang Dieu port) which is capable of receiving vessels with the capacity of 10,000 to 20,000 DWT; Tra Noc port with 3 big stores with the capacity of 40,000 tonnes, can ensure the clearance of 200,000 tonnes of goods per year and can receive vessels with the capacity of 2,500 DWT. Cai Cui port is a newly built port, which can serve vessels with the capacity of from 10,000 to 20,000 DWT, and the capacity for clearing 4.2 million tons of goods through the port per year. This project was successfully completed Phase I in April 2006 and Phase II is under implementation. After the project on dredging and building of dike system in Quan Chanh Bo sea gate is completed, Cai Cui port will become an international sea port in Can Tho city. Generally, the traffic system and the traffic serving works can meet demands for socio-economic development of the city at the present. The city will continue to further invest for more inclusive development in the future.

Water supply

The city has a total of 11 water supply plants with total capacity of 109,500 m³/day.night. Most centers of communes are served by clean water supply systems with the capacity from 10 to 20 m³/hour and big residential areas with from 50 to 100 households are connected with clean water supply systems. In the coming time, it is required to upgrade and expand these plants to meet the city's increasing demands for clean water.

When exploring details of the domestic water source of the households in the project area, the survey result showed that: Tap water is available in most households in the three districts accounted for 87.5%, ratio of household using water in drilled wells accounted for 10.4%; ratio of household using water in dug wells accounted for 0.6% and ratio of household using river/canal accounted for 12.8%.

Power supply

Currently, Can Tho city is supplied with power mainly from National Power Network (through 220KV Cai Lay - Tra Noc transmission line and Cai Lay – Rach Gia transmission line) and Tra Noc Thermal Power Plant (capacity of 193,5MW) to supply power for the city through 110KV transmission line with 6 transformer substations.

Besides the power supply sources, the city was approved by Prime Minister to construct O Mon Power Centre Project with total capacity for four 2,700MW plants including O Mon 1 with capacity of 600MW, O Mon 2 with capacity of 720MW, FO/Gas Power Plant with capacity of 660MW and O Mon 4 with capacity of 720MW. It is proposed that four power plants shall be completed in 2013 in which Unit 1 of O Mon 1 Plant was completed and operated in 2009.

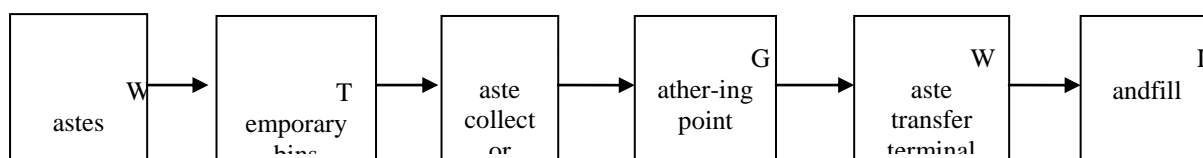
Wastewater drainage and treatment

The drainage systems of the city is mainly concentrated in centre wards of Ninh Kieu district to act as both stormwater and domestic wastewater drainage. Total length of the drainage system is 23,509m with culverts of Ø 300-1,200mm and 7,216m of construct ditches with B=200-500mm. In general, the drainage systems in the urban areas are weak and being downgraded and the drainage systems at the town centers have not enough capacity to serve for the city.

Environmental Sanitation

Volume of wastes collected in 2009 is 146,000 tons (average 400 - 420 tons per day). Tan Long landfill in Phung Hiep district, HauGiang province sized 20 ha has been invested in construction of items: Isolation embankment and canal system, garage, administration house, warehouse, waste incineration house, fences, gates, water tanks, water towers, lighting system, trees, landfills.

Current waste collection process:



Currently, about 296 tons of wastes in NinhKieu district is collected per day on average, collection rate accounts for 85-90%. Amount of wastes generated in the three remaining districts is about 120 tons per day, accounting for a collection rate of 30-50% in each district (of which: BinhThuy district is about 63 tons per day, Cai Rang about 29.5 tons per day, O Mon about 27 tons per day). Thus, the total collection volume of 4 project districts is approximately 415-420 tons per day. With such a volume, the proportion of waste collected in the 4 districts accounts for 55% of the total volume of wastes in Can Tho city.

The above data show that waste collection in the downtown areas of the city such as NinhKieu and BinhThuy is being operated fairly well. In the outlying areas, waste collection rate is not high due to the following reasons: the number of equipment is limited, the infrastructure has not met the requirements of collection and the consciousness of the people in keeping the environment clean is poor and there is lack of reasonable waste collection measures at distant places...

2.1.3. Socio-economic development directions of Can Tho city in the period 2020 – 2030

2.1.3.1. Perspectives, Objectives and Development Solutions

Overall objectives are developing Can Tho city to become the modern and developed city with typical characteristics of the Mekong Delta region and basically become an industrialized city by 2020; become socio-economic, education and training, science and technology centre, health and cultural and sports Centre of Mekong River Delta region; become the important traffic junction for inter-regional transportation and international transportation; become the key city holding the strategic position in terms of national defense and national security of Mekong River Delta region and the country; become a development pole which plays motive role in promoting the strong development of Mekong River Delta region⁹;

To achieve the objectives, the development perspectives of Can Tho city are as follows:

- Economic restructuring of city towards industrial - service - high-tech agriculture in the period to 2020 and oriented service - industrial - high-tech agriculture in the period after 2020, towards and create the potentials for development (critical infrastructure, key sectors and products, technology and human resources). The structure of economic grows fast, ensures stability, sustainability, justice, and social progress.
- Investment for economic growth in width and depth, mainly depth. Investment focuses on a number of fields which the city has competitive advantages such as: services, tourism, industry with high technological content; high quality agricultural products, seafood.

2.1.3.2. Development solutions of Industries/Sectors

Industry and construction

a, Industry

- Quickly formation and development of key industries, investing focus towards innovative equipment, advanced and modern technology, create products which have the ability to create highly competitive, large contributions on economic growth and sustainable high speed;
- Continue to focus on areas of comparative advantage, motivating development (industrial processing of agricultural, forestry and fishery, food - beverages, biotechnology, chemical and biochemical products, information technology (software, digital), energy industries and new materials, engineering and machine building, industrial building and repair of ships) investment towards intensive, high technology, clean technology;
- Prioritize the development of supporting industries, including production materials industries, spare parts, accessories, semi-finished products for industry provides mechanical, electronics - informatics, production automobile assembly, textiles - garments, leather - footwear and high-tech industries;
- To accelerate the deployment plan and complete the construction of infrastructure, attract investment in Hung Phu Industrial Zone I, II, Thot Not, North O Mon, O Mon. Adjustment of industrial planning of Thot Not IP to fit Ho Chi Minh planning road. Planning and implementing the focus information technology industry to research, develop, and product and train human resources in the information technology industry (hardware, software). Plan the high-tech incubators and hi-tech park construction. Planning industrial clusters facilitated the

⁹Reference to Decision No. 1533/QĐ-TTg of the Prime Minister dated 30 August 2013 on approving the master plan of socio-economic development of Can Tho up to 2020 and vision to 2030.

development of rural industrialization and relocation of production facilities pollutants out of residential areas and urban areas;

b, Construction

- Accelerate investment in urban areas, residential areas, urban resettlement, student houses and houses for workers and low-income, etc. Construction and management of architectural planning and urban management bright, clean, green, beautiful, civilized urban lifestyle according to the criteria of grade I urban.

Services

a, The general development orientation of service areas

- Develop Can Tho city became the center of commerce and trade of the region. Focus on development of traditional services, priority development of the service sector which has great potential, with high added value, especially in the service sector has strengths and advantages such as: Trade - Import exports, tourism, finance, banking, insurance, logistic, transport, postal - telecommunications, business services, real estate development, stock exchanges, public service science and technology;
- Promote international co-operation with major urban areas ASEAN, Asia - Pacific. Strengthen the relationship between the Can Tho city with Ho Chi Minh City and the Mekong Delta provinces to best exploit comparative advantages and development;
- Estimated total retail sales of goods and services increased on average from 20.5 to 21% / year in the period 2011-2015, and about 19-20% / year 2016-2020

b, The development orientation of the service sector

- Trade: Modernizing the commercial infrastructure. Continued consolidation, investment and development network wholesale and retail (supermarkets, wholesale markets, traditional markets in districts and communes, wards and townships), create conditions that promote the development of trade in the direction to increase the role of regional trade center;
- Tourism: Maximizing the potential and advantages of the city center, attracts powerful resources and foreign investment in tourism development, making tourism a key economic sector of the city, the tourist center of the Mekong Delta. Develop ecotourism such as gardens, rivers. Construct PhongDien ecotourism urban. Continue to invest and early complete some infrastructure, tourism, large-scale tourist areas, and synthesis amusement parks, building eco-tourism Au Islet, Khuong Islet, Tan Loc. Opening of new tourist destinations, inter-regional tours, international travel and tourism development along the waterway Mekong.

Agriculture, fishery and new rural development

Investing completed irrigation system along the river embankment to prevent twisting, sliding and landscaping. Focus on investment embankment erosion control for Xom Chai, TraNienRiver, O Mon River, TraNocRiver, Can Tho river embankments, Xa No canal, and dredging Thot Not canal.

a) General orientation of development

- Formation of sub-regional agricultural characteristics, including food production belt around urban with high-tech applications, the specialty fruit combined with tourism, the intensive high-quality rice area, the development of focused animal husbandry and aquaculture, the seedlings produced for cities and provinces in the region.
- Coordinate with facilities for scientific research in the area, at the forefront of research - the application of high-tech agriculture, contribute to the supply of products and services for high-tech agricultural implement targeted provinces agricultural development in the Mekong Delta and the country. Agricultural development associated with the construction of new rural and

process industrialization, urbanization, implement social justice, security, defense, social stability and the rural environment.

b) Development orientation of sectors

- Cultivation: Increase the proportion of the value of effective industry such as high-quality rice for export, safe vegetables, flowers, ornamental plants, fruits, industrial crops. Promote the development of rice production, the first line of fruit varieties, vegetable seeds, and flower varieties.
- Animal husbandry: Speeding up the development of the pig, cow, chicken manner focusing scale (farm), put livestock out of the urban and rural population, reduce and increase the number of farmers on each household size.
- Aquaculture: Maintaining high growth rates on the basis of various models of freshwater aquaculture suitable with ecological conditions for key products: catfish, crayfish, fish copper.
- Development of high-tech agriculture: Estimated build 3 high-tech agricultural zones in the agricultural seed center of the city in Thoi Thanh (Thoi Lai district), Song Hau Company and Co Do Company. Construct agricultural station with hi-tech applications, they are satellites of the high-tech agriculture in Vinh Thanh, Thot Not and PhongDien and implementation of projects under the program for high-tech agriculture.
- New rural development: To promote the new rural construction, paying special attention to the planning of new rural construction. Striving to achieve the rate of social new countryside criteria is 30% in 2015, 70-80% by 2002.

2.1.4. Climate change situation in Can Tho

2.1.4.1. Information of extreme phenomena

Can Tho city is located in the downstream area of Mekong Delta and often suffers from adverse impacts of natural disasters and faces with major risks such as: floods, landslides, saline intrusion, storms, cyclones... Among these, riverbank erosion, floods caused by heavy rains and tides, cyclones and thunders are natural disasters that impact the most on the lives, economy and property of the people in Can Tho city. According to the Institute of Meteorology, Hydrology and Environment, over the past 30 years, the average annual temperature in Can Tho has increased by 0.5 degrees Celsius with the highest water level rise of about 50cm. Climate change actually made storms, floods and droughts occur more in Can Tho.

2.1.4.2. Can Tho city Climate Change Office and On-going Projects

To cope with climate change, Can Tho city People's Committee has established a Steering board for the implementation of climate change response under Decision No. 158 which was based on Decision No. 2208/QĐ-UBND dated August 13, 2010. The Steering board included a chairman who was a Vice president of the city and 16 members from the relevant departments and agencies of the city. The Steering board is responsible for counseling the city People's Committee to effectively implement relevant tasks under Decision No. 158/2008/QĐ-TTg dated December 2, 2008 of the Prime Minister approving the National Target Program on response to climate change. Accordingly, the Can Tho Climate change coordination office (CCCO) has been established under Decision No. 2746/QĐ-UBND dated December 06, 2010 as a specialized agency to support the Steering board established under Decision No. 158.

Up to now, the Steering board has cooperated with organizations such as: ISET International Vietnam, Challenge to change (CTC), Institute for Social Change and Environment (ISET), Challenge to Change (CTC), National Institute for Science and Technology Policy and Strategy

Studies (NISTPASS), Dragon Institute of Can Tho University and the Southern Institute of Water Resources Research (SIWRR)... to implement forecast models, evaluate the impacts of climate change scenarios on Can Tho city and recommend implementing resilience measures. As a result, many projects are implemented, contributing to loss mitigation and resilience to climate change. Typically: Project to enhance resilience capacity to climate change of Can Tho city; Youth initiatives and communication project; Project for construction of embankment at O Mon river to celebrate for 10 years of Can Tho central level city. Community-based climate change projects; flood prevention project in An Binh ward; project to enhance resilience capacity of Can Tho city to saline intrusion caused by climate change... have been implementing, helping raise the awareness about climate change resilience of all strata of people.

The project "Response enhancement to climate change of Can Tho city" has been conducted from 2010, including activities such as: providing clean water for the people in Son islet (BinhThuy district), surveying for construction of the resettlement area in Bo Bao hamlet, Thanh An commune, Vinh Thanh district;

The most outstanding projects, programs are those for helping the people's livelihood, socio-economic development, contributing to the response to climate change that the city has been performing for 10 the last years. The urban upgrading project in Can Tho City with a total investment of 39 million USD has expanded and upgraded 62 alleys, renovated XangThoiLake and ThamTuong canal.

Can Tho city has also approved of the plan for prevention of landslides at rivers/ditches in Can Tho city by the Department of Agriculture and Rural Development with fund of 2,030 billion dong. The plan includes key measures: improving the current situation, applying precautionary and prevention measures to minimize the extent of damage caused by landslides from now on to 2015;

Farmers' resilience contest to climate change: On 07 and 08 of April, 2012 at Bai Cat Park, Can Tho city, a community media program called "Vietnamese farmers with climate change" took place with the theme "Green agriculture- clean agricultural products". The program was joined by 18 teams as the representatives of the farmer's association of southern provinces (Ho Chi Minh City, Southwest and Southeast).

This contest was a community-based activity combining multiple communication forms to help the teams and the community understand more about the causes, impacts and solutions of climate change resilience; especially the impact of climate change on agricultural production.

The program helped to raise awareness and promoted the interest of the people about the environment, farming, negative climate change impacts... since farmers are the subject to be impacted by climate change. In the framework of the contest, different forms of propaganda were expanded in Can Tho city and vicinal areas.

2.1.4.3. On-going Climate Change –related Projects

❖ Can Tho city strength analysis program

Urban Resilience to Climate Change Program was started by a World Bank group in December 2013 to help cities improve resilience capacity to new situations, as well as fight against and recover quickly from the effects related to climate change, natural disasters, significant changes and other stressful situations. The program acts as patron for analyzing, providing the grounds and causes as well as supporting the local authorities in establishing the content of climate change resilience as part of the joint program on urban management.

❖ Preparation of plan for flood risk management in Can Tho city project

According to the forecast, Can Tho city will be one of the provinces under great influences of climate change and sea level rise. To cope with this risk, Can Tho city has cooperated with the World

Bank (WB) to study the project "Building a comprehensive resilience plan for integrated flood risk management in Can Tho".

The specific assignment is to provide assessments on environment quality of each key area monitored to serve the immediate needs of all State-managed levels on environmental protection; provide timely warning of abnormal circumstances or the risks of pollution and environmental degradation; establish database on environmental quality for the purpose of storage, supply and exchange of information within the country.

❖ ***Project of Climate change response capacity enhancement for poor Khmer people in Chau Van Liem Ward - Can Tho City***

Chau Van Liem ward in O Mon district is an area having many poor Khmer people. The people living here (in the clusters supported by project 134) often face the risk of flooding by high tides and have difficult living conditions: lack of power, lack of clean water and having unstable incomes. Implementation of the project will address the matters of raising the awareness of the people about the prevention of risks from natural disasters and the participation of the people in solving flooding problems and changes in livelihood and income, solve poverty issues of the community.

❖ ***Project of Climate change response capacity enhancement and free of poverty for Con Son community, Bui HuuNghia ward, BinhThuy district, Can Tho city***

Con Son in BinhThuy district is emerged in the middle of HauRiver - it is referred to as an oasis. People living here often have to face the risk of flooding during flood season (they are protected by the dykes around the islet). The area lacks power, clean water and production, and the people's incomes are unstable. Implementation of the project will address the matters of raising the awareness of the people about the prevention of risks from natural disasters and the participation of the people in solving flooding problems and changes in livelihood and income, solve poverty issues of the community.

❖ ***Project of flood prevention capacity enhancement based on communities in BinhThuy district.***

BinhThuy is a central district of Can Tho city. The district has considerable changes but many areas in the district face with "hot" issues concerning urban flooding and livelihoods of poor people such as wards of An Hoa, Long Tuyen and ThoiAn Dong. Implementation of the project will address the matters of raising the awareness of the people about climate change and the participation of the people in solving urban flooding problems and changes in livelihood and income, solve poverty issues of the community.

2.1.5. Linked Projects

In recent years, with the support of the Government, donors and international credit institutions, Can Tho city has been implementing various programs and development projects for Mekong Delta region in general Can Thocity in particular. These projects have been bringing remarkable efficiency for socio-economic development, improvement of living conditions of people as well as poverty reduction in the urban areas. In addition, to orientate the long-term and sustainable development for Can Tho city, the Prime Minister issued Decision No. 366 on building and development of Can Tho city in the period 2009-2015. The list of 66 works to be prioritized for investment is estimated at about 79,820 billion dong. Some works under the investment include Upgrading and expanding Can Tho international airport (Phase 1); Upgrading and expanding Can Tho port complex; Upgrading National Highway 91; O Mon Electricity Center; Regional Vocational Training College; High-tech health center; Mekong delta region sports center; University of Technology; Mekong Delta Region Tourism Intermediate School; Mekong Delta Region Job

Introduction Center; Can Tho Orthosis and Rehabilitation Center and some other works. The Can Tho Embankment Project using bond fund (section from Cai Khe to Ngo Duc Ke road and the left bank side in Cai Rang district) and Upgrading National Highway 91 Project directly affect the CTUDR project through transforming works under this Project into flood control corridor in the North and East of the Can Tho city's center area. The works under two above-mentioned projects have been implemented with technical factors related to elevation, scope suitable with flooding control in center of Can Tho city.

The linkage with the donor-funded projects with same targets of urban upgrading and development, flood management, water source management, wastewater collection and treatment, urban poverty reduction has been studied to ensure no overlap in investment among the projects. This project will contribute to supplementing and coordinating with other projects to help Can Tho city maximize effectiveness of the project. Specifically, the linkage with the donor-funded projects is shown in the table bellowed:

Table 2.4: Link projects

Projects	Fund	Project information	Social impacts	Linkage with project
Can Tho Urban Upgrading Project (VUUP1)	WB	The VUUP1 was implemented from 2002 to 2014 with IDA fund of 38.5 million USD. This Project is implemented in 11 wards in NinhKieu and BinhThuy districts.	The project contributes to urban poverty reduction through infrastructure upgrading program (improvement of drainage system, internal road, canals and drainage systems, preschools, health centers, etc.) in urban area of Can Thocity, bringing benefits for around 450,000 people. The project has six main components	Work items related to upgrading alleys, improving some degraded and sedimented canals, etc. will play an important role in improving infrastructure, living conditions, improved drainage capacity and environmental sanitation for central wards of Can Tho city. However, due to limited funding source, VUUP1 project only focused on upgrading residential areas in some central wards of NinhKieu district, improving some canals which are in charge of main drainage to the North of Can Tho, including CaiKhe, ThamTuong, Ban, Cau Chua creeks, XangThoilake; replacing and investing additional culverts at the center area of NinhKieu district. The VUUP1 project addressed a part of demands for flood control at the center area of NinhKieu district. However, in order to address absolutely flood issues for a larger area, work items under this Project will be supplemented and supported with proposal for flood control, improvement of drainage system in other projects such as KFW, NUUP, especially the CTUDR project proposed.
Mekong delta region Urban Upgrading Program – Can Tho subproject (MDR-UUP)	WB	The Mekong delta region Urban Upgrading Program – Can Tho subproject (MDR-UUP) is implemented from 2012 to 2017 in 6 provinces and cities, of which Can Tho city is financed with 69.95 million USD from IDA fund to further investment in urban upgrading. The project consists of 5 components	The target of poverty reduction in urban areas will be achieved by improvement of living and environmental conditions using participatory method. In Can Tho city, besides above-mentioned targets, the Project also contribute to improving general environmental conditions of whole city, improving living conditions and quality for urban poor people. Accordingly, expanding scope and accessibility to basic infrastructure services such as drainage, water supply, environmental sanitation and transport at low-income residential areas; sustainable management of urban infrastructure, land, housing and gradually realizing the national upgrading program. Total area of upgrading investment is 494ha.	When considering in the city generally, the project only expands and upgrades low-income areas in peri-urban areas such as O Mon, Cai Rang and invests in drainage system at Bun Xang lake and some creeks such as Ngong and Sao, primary and secondary canals, creeks with functions of drainage of main roads in the center area of NinhKieu was invested for a long time ago and unqualified to function of drainage at the present. This issue has not been solved through the urban upgrading projects. In addition, both urban upgrading projects focus on upgrading existing residential areas, the connection, expansion and development of urban space has not been proposed. Therefore, the urban upgrading project focused on solving prevailing issues and small residential areas but not solve absolutely issues related to flood and environmental

Projects	Fund	Project information	Social impacts	Linkage with project
				sanitation of whole Can Tho city.
Can Tho drainage and wastewater treatment project (funded by KfW)	KfW	The project focused on wastewater collection and treatment at the center area of NinhKieu and Cai Rang districts	<p>The project focused on wastewater collection and treatment at the center area of NinhKieu and Cai Rang districts with following items:</p> <ul style="list-style-type: none"> ○ RachNgong pumping station ○ Wastewater collection culverts in NinhKieu district; ○ Culverts and pumping station conveying wastewater to the plant in Cai Rang district ; ○ Wastewater treatment plant : Area of 24.9ha in Thanh Thang, Phu Thu ward, Cai Rang district, Can Tho city 	Wastewater from beneficiary areas of the CTUDR project, especially NinhKieu district will be collected and pumped into the WWTP invested by KfW for treatment. Drainage system at the center urban area of NinhKieu district under the CTUDR project will be connected and linked to drainage systems under KfW-funded project.

Therefore, the implemented and on-going Infrastructure Development Projects in Can Tho city in the past time contributed to improving environmental sanitation and flooding in the project areas in particular and Can Tho city in general. For VUUP1, through upgrading of the residential areas in some central wards of NinhKieu district, improvement of some canals which are in charge of main drainage to the North of Can Tho, including CaiKhe, ThamTuong, Ban, Cau Chua creeks, XangThoi lake and newly-building of culverts on main roads, the project helped to solve a part of needs for flood control at the central area of NinhKieu district. Mekong Delta Region Urban Upgrading Program – Can Tho subproject (MDR-UUP) invests in drainage system at Bun Xang lake and some creeks such as Ngong and Sao, thereby contributing to solve flooding situation for residential areas in the project area. The Can Tho Drainage and Wastewater Treatment Project focused on wastewater collection and treatment at the center area of NinhKieu and Cai Rang districts.

Accordingly, the works under 3 above-mentioned projects in combination with items of two components under the CTUDR will solve generally and absolutely flooding situation and environmental sanitation of Can Tho city.

2.2. Socio- economic profile of the project area¹⁰

The Project is implemented in 3 districts of Can Tho city, including BinhThuy, NinhKieu, Cai Rang and 16 wards.

2.2.1. Socioeconomic Information on Affected Wards

2.2.1.1. Current land use

In general, few agricultural lands are present in the project area. In particular, some wards such as An Cu, Tan An, An Phu no longer have agricultural land. These are wards located in the centre of the city. Proportion of agricultural land existing in the project wards accounts for approximately 52.5% and that of non-agricultural land is 47.5%. Specifically, the land area of the wards is as follows:

Table 2.5: Total area of the wards in the project area

Type of land		Total area (ha)	1. Agricultural land	2. Non-agricultural land	Of which			
					1. Residential land	2. Land for special use	3. Unused land	4. Other land
BinhThuy district	Long Tuyen	472.12	1217.31	254.81	54.65			00.16
	An Thoi	84.96	84.63	300.33	104.24	80.54		5.55
	Long Hoa	462.66	1215.16	247.5	45.01	32.52	.19	9.78
Cai Rang district	Phu Thu	154.77	1087.97	1066.80	358.43	91.17		17.2
	Hung Phu	55.38	200.41	554.97	103.94	57.40		93.63

¹⁰ Source: Collected from available sources - June 2015. Information of An Lac Ward and An Hòa Ward is not available.

Type of land		Total area (ha)	1. Agricultural land	2. Non-agricultural land	Of which			
					1. Residential land	2. Land for special use	3. Unused land	4. Other land
	Hung Thanh	47.11	467.24	479.87	164.18	13.78	9.39	1.44
	Le Binh	36.71	113.02	123.69	43.74	5.7		4.25
Ninh Kieu district	Cu An	1.05	0	61.05	29.14	4.68		1.23
	An Tan	5.64	0	55.64	10.92	7.46		7.26
	Khe Cai	24.78	199.02	125.76	99.1	7.08	1.58	0
	An Nghiep	5.05	3.18	31.87	18.68	2.33		
	An Phu	9	0	49	239			8
	An Hoi	3.35	0	33.35	N/A	N/A	N/A	N/A
	Hung Loi	35.37	57.78	277.59	141.62	1.93		4.04
	An Khanh	41	54	387	220			67
	Xuan Khanh	08.9	4.38	204.52	N/A	N/A	N/A	N/A
Total		957.85	4704.1	4253.75	1432.85	294.59	09.16	178.34
Rate (%)			52.51	47.49				

(Source: Socio-Economic Survey, June 2015)

2.2.2. Population and Labor

Population in 19 wards of the surveyed area is 326926 people, male accounts for 48.4% and female 51.6%. Natural growth rate of the population is about 0.7%/year. Total households in 19 wards are 74,398 and the average number of household members is 4.4 persons/per household. Total zones in 19 wards are 124 including 63 zones in the project area.

Specific information of the wards is as follows:

Table 2.6: Population - Number of households in wards

Content		Population	Male	Female	Natural growth rate of population	Total households in the whole ward	Average household size	Total zones in wards	Total zones in the project area
Bi nhThuy district	Long Tuyen	16818	893	8925	/A	4177	4.0	6	2
	An Thoi	15752	105	7647	/A	4467	3.5	5	3
	Long Hoa	17418	704	8714	.8	4254	4.1	7	5
Ca i Rang district	Phu Thu	18013	144	10869	.9	4473	4.0	4	7
	Hung Phu	17806	826	8980	/A	4110	4.3	1	1
	Hung Thanh	10320	779	4541	.1	2622	3.9	6	2
	Le Binh	15414	511	7903	.8	3471	4.4	8	3
Ni nhKieu district	An Cu	20442	544	10898	.7	3530	5.8	6	4
	Tan An	7070	959	3111	.7	1266	5.6	3	1
	An Lac	12187	/A	/A	N/A	2920	4.2	6	3
	An Hoa	29856	/A	/A	N/A	8268	3.6	5	2
	Cai Khe	22968	1086	1882	.7	4803	4.8	8	2
	An Nghiep	7332	618	3714	.7	1468	5.0	3	3
	An Phu	9897	120	8777	.6	2140	4.6	4	4
	An Hoi	9699	634	5065	.8	1726	5.6	4	4
	Hung Loi	25625	4350	1275	/A	5862	4.4	6	5
	An Khanh	23681	2068	1613	/A	6083	3.9	6	6

Content		Population	Male	Female	Natural growth rate of population	Total households in the whole ward	Average household size	Total zones in wards	Total zones in the project area
	An Binh	21376	524	11852	/A	4826	4.4	8	3
	Xuan Khanh	25252	4052	11200	/A	3932	6.4	8	3
Total	To	326926	37917	146966		74398	4.4	24	63

(Source: Socio-Economic Survey, June 2015)

Situation of local labor: Only 11/19 wards have information of the population in working age.
Estimated population in working age accounts for 60.2%

Table 2.7. Population - labour in wards

Content		Population	Male	Female	Population in working age	Number of people employed	Proportion of population in working age	Proportion of the employed
Binh Thuy district	Long Tuyen	16818	7893	925	7565	N/A	45.0	N/A
	An Thoi	15752	8105	647	N/A	N/A	N/A	N/A
	Long Hoa	17418	8704	714	7730	N/A	44.4	N/A
Cai Rang district	Phu Thu	18013	7144	0869	8011	7911	44.5	98.8
	Hung Phu	17806	8826	980	N/A	17206	N/A	N/A
	Hung Thanh	10320	5779	541	6396	6278	62.0	98.2
	Le Binh	15414	7511	903	11868	5839	77.0	49.2
Ninh Kieu district	An Cu	20442	9544	0898	12292	N/A	60.1	N/A
	An Tan	7070	3959	111	N/A	N/A	N/A	N/A
	An	121	N		N/A	N	N/A	N

Content		Population	Male	Female	Population in working age	Number of people employed	Proportion of population in working age	Proportion of the employed
	Lac	87	/A	/A	A	/A	A	/A
	An Hoa	298 56	N /A	N /A	N/ A	N /A	N/ A	N /A
	Cai Khe	229 68	1 1086	1882	207 86	N /A	90 .5	N /A
	An Nghiep	733 2	3 618	714	308 3	3 040	42 .0	9 8.6
	An Phu	989 7	1 120	777	N/ A	N /A	N/ A	N /A
	An Hoi	969 9	4 634	065	788 3	N /A	81 .3	
	Hung Loi	256 25	1 4350	1275	102 34	1 0160	39 .9	9 9.3
	An Khanh	236 81	1 2068	1613	N/ A	N /A	N/ A	N /A
	An Binh	213 76	9 524	1852	160 26	N /A	75 .0	
	Xuan Khanh	252 52	1 4052	1200	N/ A	N /A	N/ A	N /A
Total		326 926	1 37917	46966	111 874	5 0434	60 .2	8 8.8

(Source: Socio-Economic Survey, June 2015)

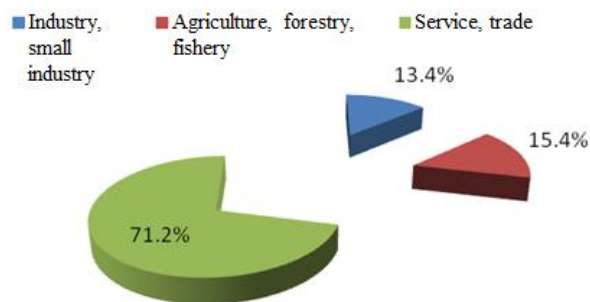
Kinh people account for a major part in the project wards (96.3%), 2.6% of households are of Hoa ethnic group and 1% is Khmer ethnic group. Besides, households of Tay, Indian, Thai, Cham, Muong, Ede ethnic groups are also presents in the wards, yet these groups take a small proportion.

As indicated in section 2.1. these ethnic groups are urbanized and integrated into the urban mainstream way of life. However, according to table 2.2. the ratio of near –poor and poor of ethnic minorityHH is higher than Kinh HH in Can Tho city but the difference is lower in the 3 urban affected districts. Thus, special attention should be paid to these groups in order to minimize negative impacts and maximize benefits.

Table 2.8. Ethnic composition in surveyed wards

Content	Total households	Number of Kinh households	Number of Hoa households	Number of Khmer households	Chay	Indian	Hai	Ham	Uong	De
1. BinhThuy district:										
Long Tuyen	4177	4143	27	7						
An Thoi	4467	4363	44	57						
Long Hoa	4254	4216	8	29						
2. Cai Rang district										
Phu Thu	4473	4444	17	10						
Hung Phu	4110	4035	47	28						
Hung Thanh	2622	2607	11	4						
Le Binh	3471	3136	301	33						
3. NinhKieu district										
An Cu	3530	3295	187	48						
Tan An	1266	865	391	10						
Cai Khe	4803	4611	105	80						
An Nghiep	1468	1366	79	19						
An Phu	2140	2128		12						
An Hoi	1726	1635	77	12						
Hung Loi	5862	5717	81	64						
An Khanh	6083	5929	95	59						

Economy structure of the project wards



Content	Total households	Number of Kinh households	Number of Hoa households	Number of Khmer households	Day	Indian	Hai	Ham	Uong	De
An Binh	4826	4733	68	25						
Xuan Khanh	3932	3676	119	137						

(Source: Socio-Economic Survey, June 2015)

2.2.3. Economy and poverty

Economic structure: The project is located in the city area, thus, the economic structure of the wards tends to shift to services, commerce/trade which accounts for 71.2%, followed by agriculture, forestry, fishery, industry (15.4%) and handicraft clusters (13.4%).

Agriculture structure in some wards still takes a high proportion such as Long Hoa (61%), Phu Thu (82%). Meanwhile in wards under Ninh Kieu district, the agriculture-related economic structure tends to move to 0%, for example An Khanh ward (5%), An Binh (1%), for the other wards, this rate is 0%.

Results from available information show that the average income of households in the project wards is 43.3 million dong per person per year.

The rate of poor and near poor households tends to decrease for 3 years from 2012 to 2014. The difference between poor households and near-poor households is negligible. In 2014, poor households concentrated in the wards of An Binh (2.09%), Phu Thu (1.97%) and Long Hoa (1.84%). Near-poor households concentrated in the wards of Phu Thu (4.73%), Le Binh (2.29%) and An Binh (2.03%).

2.2.4. Local

electric system residential

In roads of the connected the lighting. However, currently not lighting.

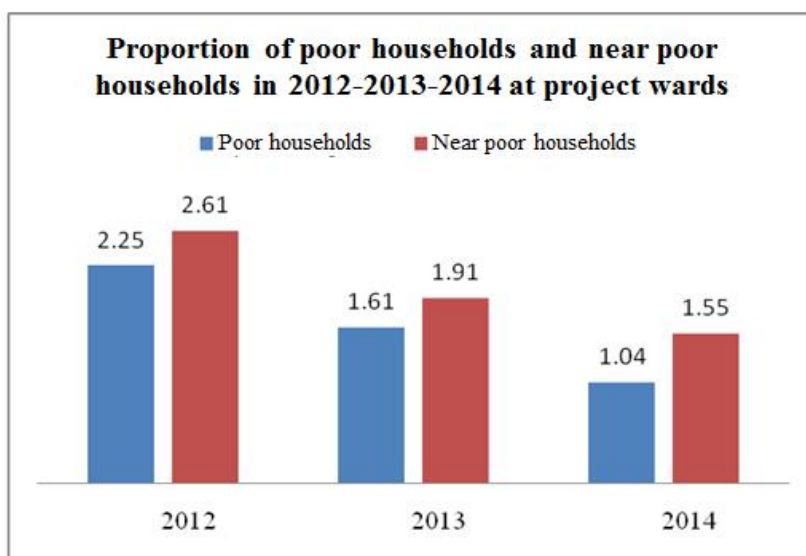
Road

The recent years improved, yet

Proportion of asphaltting and concreting in the whole wards achieved not so high that the needs on freight and travel of the people are not served better. Some earth, stone roads existing should be invested to upgrade and expand in the future. Overall, downtown wards have a relatively complete road system. Road system in some outlying wards is currently degraded.

Health stations and schools

Most health stations of wards meet prescribed standards. However, some wards health stations is borrowing buildings of the wards People's Committees such as ones in Hung Phu ward and Hung Thanh ward or the health stations are degraded such as one in Le Binh ward. Medical stations were built long ago and are now degraded. Besides, due to the upgrading of Tran Hung Dao road, the facility ground is 1 meter lower than the road surface, which no longer satisfies the needs on health



infrastructure

Lighting in alleys and areas

general, all main wards are 100% City public network 100%. some alleys are equipped with power.

system

quality of roads in has been not significantly.

check and treatment. Hence, health stations should be newly built to meet the health care needs of the people.

Schools in wards generally meet the standards. In some wards, schools are currently being built/renovated to meet the standards. Some schools have deteriorated and need to be rebuilt and renovate as well.

Markets and trade centers

The number of wards having large markets or trade centers is very small in the project wards: On the areas of the wards exist temporary markets. These are the places which are complained by the local community due to environmental pollution at the market areas affecting the lives of the surrounding people. However, purchase at the temporary markets is a daily routine of the people and is unlikely to cancel.

The project will affect one market in Tan An ward. A new market will be built. Consultation meetings were carried out to minimize negative impacts for business household in this market.

Drainage system

Overall in main streets, the pavements are equipped a centralized drainage system. However, since the drainage system in alleys is not as complete and consistent as that in main roads, floods occur when it rains and the water is not drained well. This situation is easy to see in the project area:

Water supply system

Most of the project wards have a tap water supply system available. In some wards, there are households not provided with tap water and they are using water in dug/drilled wells.

Wastes - Toilets and Sanitation

Domestic wastes in residential areas in the wards are collected properly: 100%. In small alleys, wastes are gathered at alley head where the wastes are collected by the collecting unit. Each household is charged 15 thousand dong per month on average for waste collection, for street households, it is 30 thousand dong per household per month.

Amusement parks and community cultural houses

Almost all of the wards in the project area lack a playground for the community. Except some central wards where some entertainment spots gathering people from other wards exist.

The survey also shows that most of the wards have a community cultural house and public information house. However, some cultural houses built long ago have been degrading.

2.2.5. Impact of climate change in the project area

Condition climate situation

Rising tides are common in the project wards and often appear in September -October every year with 2 times on daily basis.

Wards with canals, ditches, rivers, embankments running through are observed landslides along the river and reflected by many people. This provides potential risks to the lives and houses of families living in and near these areas.

Responses to climate change

In general, responses to climate change in local areas are of single nature and each locality has different measures. Every year, any locality has ditch landslides is provided with little financial supported by the district. Thus, the local wards authorities have to mobilize funds from the local people such as fund for flood prevention at 10-30 thousand dong per household or a custom contribution of the households. Work related to climate change adaptation in wards is mainly as reinforcing banks of canals, rivers and ditches; relocating households at risk of suffering from landslides to temporary shelters, establishing a team for flood prevention.

2.3. Results from Socio-economic household survey

2.3.1. General information

Number of households and household size surveyed

The consultant conducted a socio-economic survey on 4% of total households of seven study sites, with a sample size of 3,425 out of 74,389 households. In the 3,425 households surveyed, there are 14,830 persons currently living in the households, the average rate of household members/households living together in the same houses for 6 months a year is estimated 4.3 persons per household. Based on the number of households in each ward, the proportion of survey in the wards is different.

Table 2.9. Number of households surveyed

District	Ward	Number of households	Number of households surveyed
BinhThuy district:		12898	579
	An Thoi	4467	199
	Long Tuyen	4177	180
	Long Hoa	4254	200
NinhKieu district		46824	2064
	CaiKhe	4803	200
	An Hoi	1726	95
	An Cu	3530	158
	Tan An	1266	100
	An Hoa	8268	306
	An Nghiep	1468	140
	An Lac	2920	144
	An Phu	2140	118

District	Ward	Number of households	Number of households surveyed
Cai Rang district	Xuan Khan	393	193
	An Khanh	608	233
	Hung Loi	586	174
	An Binh	482	203
		146	782
	Hung Phu	411	201
	Hung Thanh	262	156
	Le Binh	347	199
	Phu Thu	447	226
	Total	743	3425

(Source: Socio-Economic Survey, June 2015)

Gender of the respondent

To ensure gender balance in the survey, the rates of male respondents and female respondents are relatively equal. 55, 2% of respondents are male and 44, 8% are female. Details in the wards are as follows:

Table 2.10. Gender of the respondent

Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Male	Quantity	344	1084	464	1892
	Rate (%)	58.4%	52.8%	9.3%	55.2%
Female	Quantity	245	970	318	1533

	Rate (%)	41.6%	47.2%	4 0.7%	4 4.8%
Total	Quantity	589	2054	782	3425
	Rate (%)	100.0%	100.0%	1 00.0%	1 00.0%

(Source: Socio-Economic Survey, June 2015)

Age of respondents

The survey results show that, in total 3,425 people interviewed, the respondents aged 26-55 years old take majority (accounting for 58.4%); followed by the group of people aged 55 or more (39.1%), and only a small proportion of 2.5% of respondents are under 25 years old. Ages of the participants who answered the questionnaires are listed as follows:

Table 2.1. Age of respondents

Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
< 25 years old	Quantity	9	63	15	87
	Rate (%)	1.5%	3.1%	1.9%	2.5%
26-35 years old	Quantity	60	155	90	305
	Rate (%)	10.2%	7.5%	11.5%	8.9%
36-45 years old	Quantity	124	385	196	705
	Rate (%)	21.1%	18.7%	25.1%	20.6%
46-55 years old	Quantity	164	603	223	990
	Rate (%)	27.8%	29.4%	28.5%	28.9%
55-65 years old	Quantity	171	626	178	975
	Rate (%)	29.0%	30.5%	22.8%	28.5%
> 65 years old	Quantity	61	222	80	363
	Rate (%)	10.4%	10.8%	10.2%	10.4%

Content		District			To tal
		BinhT huy	Ninh Kieu	Cai Rang	
	e (%)		%	%	6%
Total	Qu antity	589	2054	782	34 25
	Rat e (%)	100.0 %	100. 0%	100. 0%	10 0.0%

(Source: Socio-Economic Survey, June 2015)

Relationship to the head of the household

Respondents in the survey as head of the household accounted for 73.6%, of which 83% of respondents are heads of the households in Cai Rang district, 71.8% in NinhKieu and 67.2% in BinhThuy respectively. 13.1% of respondents are spouses of the household heads. That heads of the households or spouses of the household heads participated in the survey has important significance showing a high reliability to the survey questions. The respondent's relationship to the head of the household is detailed as follows:

Table 2.11. Relationship to the head of the household

Content		District			To tal
		BinhT huy	NinhKi eu	Cai Rang	
Head of the household	Qu antity	396	1475	64 9	25 20
	Rat e (%)	67.2%	71.8%	83. 0%	73. 6%
Spouse of the head	Qu antity	132	245	72	44 9
	Rat e (%)	22.4%	11.9%	9.2 %	13. 1%
Offspring	Qu antity	57	268	53	37 8
	Rat e (%)	9.7%	13.0%	6.8 %	11. 0%
Parent	Qu antity	2	25	2	29
	Rat e (%)	.3%	1.2%	.3 %	.8 %
Other	Qu	2	41	6	49

	Quantity				
	Ratio (%)	3.3%	2.0%	0.8%	1.4%
Total	Quantity	589	2054	782	3425
	Ratio (%)	100.0%	100.0%	100.0%	100.0%

(Source: Socio-Economic Survey, June 2015)

Educational level

According to the survey results, out of 3425 people interviewed, the respondents who joined high schools represent 36.6% of the surveyed HH; followed by those who joined secondary schools (34.2%). People who completed colleges/universities account for 7.4%. Specific educational level of the respondents in each district is shown in the table below:

Table 2.12. Educational level of the respondent

Content		District			Total
		Binh Thuy	Ninh Kieu	Can Lai Rang	
Illiteracy	Quantity	13	4	2	19
	Ratio (%)	2.2%	0.2%	0.3%	0.6%
Primary school	Quantity	170	260	72	702
	Ratio (%)	28.9%	12.7%	4.8%	20.5%
Secondary school	Quantity	239	628	306	1173
	Ratio (%)	40.6%	30.6%	9.1%	34.2%
High school	Quantity	141	933	179	1253
	Ratio (%)	23.9%	45.4%	2.9%	36.6%
College/Vocational school	Quantity	8	41	3	52
	Ratio (%)	1.4%	2.0%	0.4%	1.5%
University	Quantity	14	168	9	201

Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
	Rate (%)	2.4%	8.2%	2.4%	5.9%
Above university	Quantity	4	20	1	25
	Rate (%)	.7%	1.0%	.1%	.7%
Total	Quantity	589	2054	782	3425
	Rate (%)	100.0%	100.0%	100.0%	100.0%

(Source: Socio-Economic Survey, June 2015)

Ethnic groups

The survey shows that there are three main ethnic groups living in the project districts /wards. Kinh group still takes a large proportion of 96.1%. Followed by Hoa ethnic group (2.5%) and Khmer group (1.3%). Khmer and Hoa ethnic groups are concentrated in Ninh Kieu district. Details of ethnic groups surveyed are as follows:

Table 2.13. Ethnic composition of the household

Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Kinh	Quantity	572	1943	778	3293
	Rate (%)	97.1%	94.6%	99.5%	96.1%
Hoa	Quantity	14	68	4	86
	Rate (%)	2.4%	3.3%	.5%	2.5%
Khmer	Quantity	2	41	0	43
	Rate (%)	.3%	2.0%	.0%	1.3%
Other	Quantity	1	2	0	3

Content		District			T otal
		BinhT huy	Ninh Kieu	Cai Rang	
	Rat e (%)	.2%	.1%	.0%	. 1%
Total	Qu antity	589	2054	782	3 425
	Rat e (%)	100.0 %	100.0 %	100. 0%	1 00.0%

(Source: Socio-Economic Survey, June 2015)

Occupation

The identification of the household head's occupation is significant in assessing the stability in daily life of the people.

The survey result shows that, of total 3425 households' interview, the percentage of households answered their jobs as hired laborers/employees accounted for 27.4% of the survey population. Followed by 26.6% of respondents are in trade/service and 18.5% of respondents as retired cadres. The proportion of servants accounted for only 18.5% of the survey population and most are concentrated in NinhKieu District (15.3%). Professional proportion of the respondents in the wards is presented in the following table:

Table 2.14. Occupation of the respondent

Content		District			T otal
		BinhT huy	NinhKie u	Ca i Rang	
Agriculture	Qua ntity	119	18	14 1	2 78
	Rate (%)	20.2%	.9%	18. 0%	8 .1%
Trade/Service	Qua ntity	108	615	18 8	9 11
	Rate (%)	18.3%	29.9%	24. 0%	2 6.6%
Retired/houseke eping	Qua ntity	101	455	76	6 32
	Rate (%)	17.1%	22.2%	9.7 %	1 8.5%
Servant	Qua ntity	47	315	73	4 35
	Rate (%)	8.0%	15.3%	9.3 %	1 2.7%

Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Hired laborers/employee	Quantity	181	499	259	939
	Rate (%)	30.7%	24.3%	33.1%	7.4%
Jobless	Quantity	17	66	40	123
	Rate (%)	2.9%	3.2%	5.1%	1.6%
Other	Quantity	16	86	5	107
	Rate (%)	2.7%	4.2%	0.6%	0.1%
Total	Quantity	589	2054	782	3425
	Rate (%)	100.0%	100.0%	100.0%	100.0%

(Source: Socio-Economic Survey, June 2015)

Household size

According to the survey, there are 3,425 households with 14,830 inhabitants; the average number of inhabitants per household is 4.3. The survey result shows that the household size in the project area is medium, of which the households sized 3-4 persons take the highest proportion of 50.9%; households sized 1-2 persons accounted for 13.4%, which are considered vulnerable minority households and mainly households of the elderly. The number of households with five or more persons accounted for 35.7%. The household size surveyed is shown in details as follows:

Table 2.15. Household size

Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
1-2 persons	Quantity	63	270	125	458
	Rate (%)	10.7	13.1	16.0	13.4
3-4 persons	Quantity	309	1000	434	1743
	Rate (%)	52.5	48.7	55.5	50.9

from 5 or more	Quantity	Quan	217	784	223	12 23
	Rate (%)	Rate	36.8	38.1	28.5	35. 7
	Quantity	Quan	589	2054	782	34 25
	Rate (%)	Rate	100	100	100	10 0
Total						

(Source: Socio-Economic Survey, June 2015)

The largest household size in the project area is 12 persons. These are families having many children or including 2-3 generations living together in the same house.

The number of households living in the same house

The survey result shows that nuclear families with one generation living together in the same house accounted for 95.1%. Of which, BinhThuy district takes the highest rate of 97.1%. The proportion of two households living together in the same house takes only 4% (137 households). The largest household size sharing the same house in the project area is 7 households (1 great household). Details of the number of households living in the same house in the wards are as follows:

Table 2.16. The number of households living in the same house

Number of households		District			Total
		BinhThuy	NinhKieu	Cai Rang	
1	Quantity	572	1939	746	3257
	Rate (%)	97.1	94.4	95.4	95.1
2	Quantity	16	92	29	137
	Rate (%)	2.7	4.5	3.7	4.0
3	Quantity	0	15	5	20
	Rate (%)	0.0	0.7	0.6	0.6
4	Quantity	1	4	0	5
	Rate (%)	0.2	0.2	0.0	0.1
5	Quantity	0	4	0	4
	Rate (%)	0.0	0.2	0.0	0.1

Nu mber of households		District			Total
		BinhT huy	NinhKi eu	Cai Rang	
	Rat e (%)	0.0	0.2	0.0	0.1
6	Qua ntity	0	2	2	4
	Rat e (%)	0.0	0.1	0.3	0.1
7	Qua ntity	0	1	0	1
	Rat e (%)	0.0	0.0	0.0	0.0
Tot al	Qua ntity	589	2054	782	3414
	Rat e (%)	100	100	100	100

(Source: Socio-Economic Survey, June 2015)

Living conditions of households

Assets: The value of assets in each family depends much on their economic situation. Essential items and low value assets are often present in households with average standard of living, whereas well-off and rich households often use valuable assets. It can be seen that color TV is the common media, so 96.7% of households own TVs; 94.4% of households have motorcycles, 76.1% have refrigerators and 2.4% own cars. Households' assets are shown in details as below:

Table 2.17. Household's assets

Content		District			T otal
		BinhT huy	Ninh Kieu	Cai Rang	
Expensive furniture	Qua ntity	112	386	134	632
	Rate (%)	19.0%	18.8 %	17.1%	18.5%
Motorcycl e	Qua ntity	558	1948	726	3232
	Rate (%)	94.7%	94.9 %	92.8%	94.4%
Bicycle	Qua ntity	351	1048	304	1703

Content		District			T otal
		BinhT huy	Ninh Kieu	Cai Rang	
	Rate (%)	59.6%	51.0 %	38.9%	49 .7%
Radio	Qua ntity	80	464	57	60 1
	Rate (%)	13.6%	22.6 %	7.3%	17 .5%
TV	Qua ntity	574	1987	750	33 11
	Rate (%)	97.5%	96.7 %	95.9%	96 .7%
Refrigerat or	Qua ntity	435	1712	460	26 07
	Rate (%)	73.9%	83.3 %	58.8%	76 .1%
Washing machine	Qua ntity	252	1355	215	18 22
	Rate (%)	42.8%	66.0 %	27.5%	53 .2%
Phone	Qua ntity	557	1812	670	30 39
	Rate (%)	94.6%	88.2 %	85.7%	88 .7%
Air conditioner	Qua ntity	106	602	80	78 8
	Rate (%)	18.0%	29.3 %	10.2%	23 .0%
Car	Qua ntity	11	62	8	81
	Rate (%)	1.9%	3.0%	1.0%	2. 4%

(Source: Socio-Economic Survey, June 2015)

The survey result shows that most of the well-off and rich households have the need to use all kinds of expensive and luxurious items and equipment. These are households doing trade, providing services and a few are of the State servants. For other items of less economic value such as: electric fans, radios, televisions and video players, there is not a significant difference among the households, the difference is just in the value of assets among the households having different standards of living.

Housing: In households, houses partly reflect economic situation of the households whether they are well off, average or poor. Economic conditions of the households tend to be better. The type of housing chosen for construction in the past few years is one-floor house with concrete roof or strong two-floor house. Dwelling houses are also separated from kitchens and auxiliary structures such as bathrooms or toilets. Houses of the households built on legitimate land with land use right certificates and are convenient for transportation, health services, education and most of houses are on long-standing housing land.

The survey of 3,425 households shows that the common house type of the households is grade 4 house which accounted for 58%, followed by 36, 7% of households having solid houses (grade 3 house). The survey shows that 153 households (4.5%) are currently living in "temporary" houses. The number of households having houses with 2 floors or more takes a small proportion of 3.4%. Details are shown in the table below:

Table 2.18. Housing of the household

Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Grade 2,3 house	Quantity	175	961	121	1257
	Rate (%)	29.7%	46.8%	15.5%	36.7%
Grade 4 house	Quantity	370	1002	615	1987
	Rate (%)	62.8%	48.8%	78.6%	58.0%
Temporary house/tent	Quantity	31	80	42	153
	Rate (%)	5.3%	3.9%	5.4%	4.5%
Other	Quantity	13	11	4	28
	Rate (%)	2.2%	.5%	.5%	.8%
Total	Quantity	589	2054	782	3425
	Rate (%)	100.0%	100.0%	100.0%	100.0%

(Source: Socio-Economic Survey, June 2015)

❖ *Location of houses*

Identifying the location of the houses used by households is necessary to serve the community consultation on the plan for implementation of project-related works as well as compensation policies and appropriate support for the households affected by implementing the project.

The result is shown as follows:

Table 2.19. Location of the households' house surveyed

Content		District			Total
		Bi nhThuy	Nin hKieu	C ai Rang	
On roads/streets	Q uantity	234	555	154	43
	R ate (%)	39.7%	27.0%	19.7%	7.5%
In alleys that are more than 5m wide	Q uantity	31	149	27	707
	R ate (%)	5.3%	7.3%	3.5%	1.0%
In alleys that are 3-5 m wide	Q uantity	89	521	81	91
	R ate (%)	15.1%	25.4%	10.4%	0.2%
In alleys that are 2-3 m wide	Q uantity	124	480	223	27
	R ate (%)	21.1%	23.4%	28.5%	4.2%
In alleys that are less than 2m wide	Q uantity	106	327	295	28
	R ate (%)	18.0%	15.9%	37.7%	1.3%
Other	Q uantity	5	20	2	7
	R ate (%)	.8%	1.0%	.3%	8%

(Source: Socio-Economic Survey, June 2015)

Of the total 3,425 households surveyed, 943 households (27.5%) stated their house position is in alleys that are more than 5m wide. 827 households (24, 2%) stated their house position is in alleys that are 2-3m wide.

❖ *Screening vulnerable groups*

Vulnerable groups in the project area include: (i) ethnic minorities (mainly Khmer); (ii) a group of single women with dependents, and (iii) Disabled head of household;

- *Ethnic minorities:* In 03 project districts, there are no community cluster of ethnic minorities living separately, only 11 households lived integrated with Kinh in the social and working activities.. Hence there is no need for specific action plan specific for this group.

- *Group of single women with dependents:* 465 households of this group have principal income from hired labour, their income is not stable, although local authorities had them attended the primary class profession (nail, makeup, hairdressing) in counties with funding to support of 10,000 VND/session/trainee with 45-60 days training period. However, practical skills from this training and the ability to find a job from the job were also limited. Therefore, effectiveness of those training programs is very low.
- *Disabled persons:* The project area has a number of households with Agent Orange and now receiving social support; there are also some women with disabilities and currently doing the basic work at home (embroidery, garments). However this amount is not very much, so there is no need to prepare an action plan for these groups.

The survey result of 3,425 households in 19 wards shows that the proportion of households headed by women accounts for 27.2% of the vulnerable households. This proportion is higher in Ninh Kieu district (15.1%) than that in Cai Rang district (12.6%) and Binh Thuy district (9.6%). The proportion of poor households accounts for 5.8% and poor households accounts for 2.4%. Details are shown in the table below:

Table 2.20. Vulnerable households

Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Household under preferential treatment policy	Quantity	41	162	31	234
	Rate (%)	7.0%	7.9%	4.0%	6.8%
Poor household	Quantity	5	53	23	81
	Rate (%)	.8%	2.6%	2.9%	2.4%
Household with disabled people	Quantity	30	50	10	90
	Rate (%)	5.1%	2.4%	1.3%	2.6%
Near-poor household	Quantity	22	133	43	198
	Rate (%)	3.7%	6.5%	5.5%	5.8%
Women-headed household	Quantity	56	311	98	465
	Rate (%)	9.6%	15.1%	12.6%	13.6%

(Source: Socio-Economic Survey, June 2015)

❖ *Incomes and expenditures*

Household's situation by surveyor's criteria:

Since each project area has different economic situation, the economic viewpoints of households in each place also differ. The economy of one household might be considered to be well

off but to other areas, that household's economy is just medium. Therefore, the role of surveyors in classifying households' economy is very important. The surveyor will apply the following criteria to classify households' economy:

- On the poverty rate following the MOLISA's standards of each ward reported
- On the local authority's viewpoints of the households' life and economy (incomes, expenditures per household per month, assets and living facilities in families, occupation, children...)
- During the interview with the households, the surveyor should observe the economic conditions of the households such as houses and living facilities in families. From that, state of the households is identified.

Based on the above criteria, of 3,425 households, poor households, in the surveyor's viewpoint, having an income of approximately 992,000 VND per person per month accounted for 6.9% (227 households), households with average income of 1,671,000 VND per person per month accounted for 74.8% (2,561 households), well-off households with income of approximately 2,208,000 VND per person per month accounted for 18.3% (627 households).

Table 2.21. Household's economy by income and expenditure

Household's economy		Household size	Expenditure per household per month	Income per household per month	Average expenditure per person per month	Average income per person per month
Poor	Mean	4.1	3300.42	4105.91	797	992
		237	237	237		
Medium	Mean	4.3	5087.06	7186.96	1183	1671
		2561	2561	2561		
Well-off	Mean	4.5	6533.65	9980.06	1445	2208
		627	627	627		
Total	Mean	4.3	5228.25	7485.08	1207	1729
		3425	3425	3425		

(Source: Socio-Economic Survey, June 2015)

Obviously, when evaluating by standard of living, poor households are highly vulnerable because they do not have enough money to pay for their life and for expenses in urban areas. Their income depends on many factors and market risks when they have to do unstable jobs for a living, ... Therefore, in the course of performing the project works, poor and vulnerable households need to be

concerned appropriately as if they have to be resettled and relocated to new places, the opportunity to restore the income and sustain life for these households is critical.

Table 2.22. Household's situation by districts

Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Poor	Quantity	28	167	42	237
	Rate (%)	4.8%	8.1%	5.4%	6.9%
Medium	Quantity	387	1541	633	2561
	Rate (%)	65.7%	75.0%	80.9%	74.8%
Well off	Quantity	174	346	107	627
	Rate (%)	29.5%	16.8%	13.7%	18.3%
Total	Quantity	589	2054	782	3425
	Rate (%)	100.0%	100.0%	100.0%	100.0%

(Source: Socio-Economic Survey, June 2015)

Notes: Mean = mean value; N = Case. The above figures have been rounded with unit 1000 dong

Incomes and expenditures

The surveyors sometimes face with difficulties in collecting information about the income and expenditures of the households. Because it is the common psychology of the respondents to not disclose their income sources, which is a sensitive issue in every Vietnamese family. Thus, in some extent, the amount of incomes and expenditures collected is only relative.

Table 2.23. Incomes and expenditures by person per month in wards

District		Household size	Expenditure per household per month	Income per household per month	Average expenditure per person per month	Average income per person per month
Binh Thuy	Mean	4.3	4696	6850	1090	1589
	N	589	589	589		

District		Household size	Expenditure per household per month	Income per household per month	Average expenditure per person per month	Average income per person per month
NinhKieu	Mean	4.5	5755	8253	1290	1850
	N	2054	2054	2054		
Cai Rang	Mean	4.0	4247	5948	1062	1487
	N	782	782	782		
Total	Mean	4.3	5228	7485	1207	1729
	N	3425	3425	3425		

(Source: Socio-Economic Survey, June 2015)

Notes: Mean = mean value; N = Case. The above figures have been rounded with 1000 dong unit

The above results show that:

- Overall, the proportion of expenditure takes two third of the household's income per month. The average income of 3,425 households surveyed is calculated to be about 7.4 million dong per household per month and expenses at about 5.2 million dong per household per month. Correspondingly, the average income per person per month of 3,425 households is 1.7 million dong per person per month, respectively 20.7 million dong per person per year and the average expense is about 1.2 million dong per person per month, corresponding to about 14.5 million dong per person per year. Thus, the households spent about 69.8% of the incomings in a month. The average remaining rate is 30.2%.

Based on the survey result, evaluating the incomes and expenditures in the districts shows the income gap among the districts. The high-income district is NinhKieu with the average income of 18.5 million dong per person per month. The incomes of BinhThuy and Cai Rang districts are relatively equal, 15.8 million dong per person per month compared with 14.8 million dong per person per month. When comparing the income of the wards, there is also an imbalance of incomes and expenditures of the project wards. An Cu ward has higher income (10 million dong per household per month) than other wards, followed by Tan An and An Hoa wards (about 9.5 million dong per household per month). Phu Thu ward has the lowest income (4.6 million dong per household per month). Wards having high incomes means that they have high expenditure level as well. Generally, well-off households often have greater expenditures than poor/average households in all types of spending: expenses for study, health care, electricity, water, travel or helping others... of well-off households are higher than those of poor/average households.

- Detailed incomes and expenditures of the project wards are as follows:

Table 2.24. Incomes and expenditures of the project wards

ward	Name of	H size	Exp enditure per household per month	Inco me per household per month	A verage expendit ure per person per month	Av erage income per person per month	he remaini ng amount per HH/ month	ate of expense s / incomes	Av erage expenditure per household per month	Ave rage income per household per month	Avera ge expenditure per person per year	A verage income per person per year	
Thoi	An	ean	M .5	599 9	9334	1 336	20 79	2 335	4.3%	71 988	112 010	16033	2 4947
			N 99	199	199								
Tuyen	Long	ean	M .2	360 0	5439	8 49	12 83	1 839	6.2%	43 200	652 63	10189	1 5392
			N 80	180	180								
Hoa	Long	ean	M .3	437 8	5666	1 025	13 27	1 288	7.3%	52 530	679 86	12302	1 5922
			N 00	200	200								
	CaiKhe	ean	M .3	514 3	7538	1 193	17 49	2 395	8.2%	61 710	904 50	14318	2 0986
			N 00	200	200								
	An Hoi	ean	M .5	599 6	8011	1 100	14 70	2 015	4.8%	71 949	961 33	13202	1 7639
			N 5	95	95								
	An Cu	ean	M .6	685 9	1004 1	1 504	22 02	2 182	8.3%	82 314	120 494	18051	2 6424
			N 58	158	158								

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ward	Name of	H size	Exp enditure per household per month	Inco me per household per month	A verage expendit ure per person per month	Av erage income per person per month	he remaini ng amount per HH/ month	ate of expense s / incomes	Av erage expenditure per household per month	Ave rage income per household per month	Avera ge expenditure per person per year	A verage income per person per year	
Nghiep	Tan An	ean	M .7	566 0	9555	1 212	20 46	€ 895	€ 9.2%	67 920	114 660	14544	2 4552
			N 00	100	100								
	An Hoa	ean	M .6	642 2	9468	1 405	20 72	€ 046	€ 7.8%	77 067	113 620	16864	2 4862
			N 06	306	306								
	An	ean	M .0	541 8	8743	1 341	21 64	€ 325	€ 2.0%	65 014	104 914	16093	2 5969
			N 40	140	140								
	An Lac	ean	M .0	523 7	6567	1 316	16 50	€ 331	€ 9.7%	62 842	788 08	15789	1 9801
			N 44	144	144								
	An Phu	ean	M .4	565 1	7706	1 296	17 67	€ 055	€ 3.3%	67 815	924 71	15554	2 1209
			N 18	118	118								
	XuanK	ean	M .4	713 5	9393	1 319	17 36	€ 258	€ 6.0%	85 623	112 719	15827	2 0835
			N 93	193	193								
	An		M	504	7376	1	17	€	€	60	885	14247	2

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ward	Name of	H size	Exp enditure per household per month	Inco me per household per month	A verage expendit ure per person per month	Av erage income per person per month	he remaini ng amount per HH/ month	ate of expense s / incomes	Av erage expenditure per household per month	Ave rage income per household per month	Avera ge expenditure per person per year	A verage income per person per year	
Khanh		ean	.3	6	187	35	330	8.4%	551	06		0825	
		N	33	233	233								
Loi	Hung	ean	.7	459 9	7331	1 240	19 76	2 732	6 2.7%	55 186	879 72	14875	2 3712
		N	74	174	174								
Binh	An	ean	.4	553 3	7005	1 252	15 85	1 472	7 9.0%	66 390	840 59	15020	1 9018
		N	03	203	203								
Phu	Hung	ean	.2	453 1	6395	1 081	15 26	1 863	7 0.9%	54 376	767 34	12978	1 8314
		N	01	201	201								
Thanh	Hung	ean	.0	397 6	6047	9 87	15 00	2 071	6 5.8%	47 715	725 61	11840	1 8005
		N	56	156	156								
	Le Binh	ean	.2	517 4	6903	1 226	16 36	1 728	7 5.0%	62 092	828 30	14714	1 9628
		N	99	199	199								
Thu	Phu	ean	.6	336 3	4641	9 29	12 82	1 278	7 2.5%	40 354	556 89	11148	1 5384

ward	Name of	H size	Exp enditure per household per month	Inco me per household per month	A verage expendit ure per person per month	Av erage income per person per month	he remaini ng amount per HH/ month	ate of expense s / incomes	Av erage expenditure per household per month	Ave rage income per household per month	Avera ge expenditure per person per year	A verage income per person per year
Total		N 26	226	226								
	Mean	1.3	5228	7485	1207	1729	257	9.8%	62739	89821	14489	20744
		N 425	3425	3425								

(Source: Socio-Economic Survey, June 2015)

Notes: The figures have been rounded with unit 1000 dong Mean = mean value, N = number of cases

2.3.2. Power supply situation

Monthly electricity consumption of the households is mainly from 50kW to 100 kW accounting for 28.8% of the households surveyed, followed by about 28.7% consumed from 101-150 kW. Ninh Kieu is the central district of the city, so its monthly electricity consumption is over 2000 kW (21.9%), which is higher than that of Binh Thuy (17.5%) and Cai Rang (6.4%). The use of electricity in the districts is as follows:

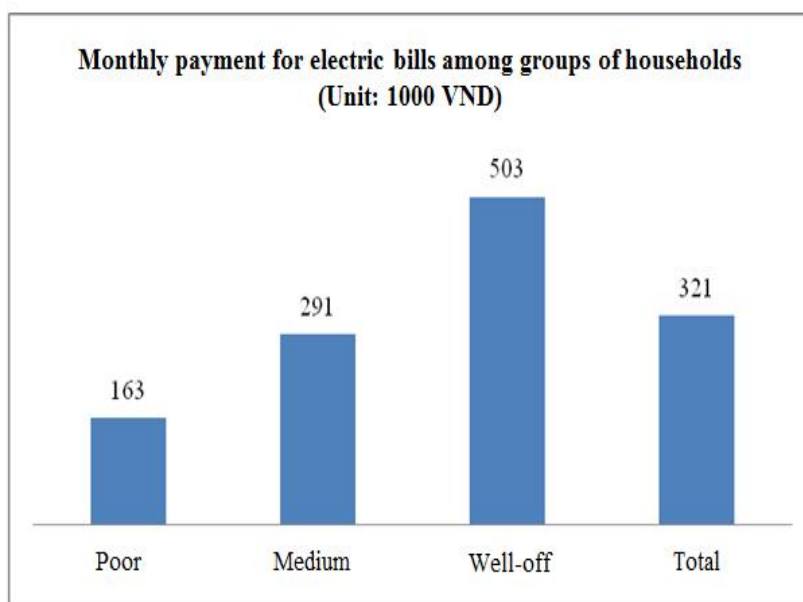
Table 2.25. Monthly electricity consumption of households

Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
< 50 KW	Quantity	50	98	55	203
	Rate (%)	8.5%	4.8%	7.0%	5.9%
50 -100 KW	Quantity	142	511	333	986
	Rate (%)	24.1%	24.9%	4.2%	8.8%
101-150 KW	Quantity	173	587	222	982
	Rate (%)	29.4%	28.6%	2.8%	8.7%
151-200 KW	Quantity	121	409	122	652
	Rate (%)	20.5%	19.9%	1.5%	9.0%
> 200 KW	Quantity	103	449	50	602
	Rate (%)	17.5%	21.9%	0.4%	7.6%
Total	Quantity	589	2054	782	3425
	Rate (%)	100.0%	100.0%	100.0%	100.0%

(Source: Socio-Economic Survey, June 2015)

The survey shows a difference in power consumption between groups of households by economic status. Poor/average households consumed electricity less than well-off/ rich households, specifically: 31.6% of poor households consume less than 50 kw per month per household while this rate for well-off households is 1.3%; 40.4% of rich households, in contrast, consume more than 200kw per month per household while for poor households, it is 5.1%. Low income means that the amount paid for monthly consumed electricity is low as well. Poor households pay about 163

thousand household electricity, households dong per month and households per month.



dong per month for the while well-off pay 503 thousand household per average 291 thousand dong household per

to the power residential

• Quality of power

According survey data on quality in areas, the power

source is not immediate concern to the demand of the people when only 2.4% stated that power is weak or very weak. 56.1% said that the power is strong enough for their demand and 40.7% said it is normal and acceptable. Overall, no differences are observed between the project areas.

70.4% of households said that the power provided to the households is hardly cut on a monthly basis. About 20% of the households reflected that the electricity is often cut 1-2 times a month and 3.4% said it is cut 3-5 times a month.

2.3.3. Transportation situation

Current situation of roads in alleys/hamlets

In general, roads in alleys/hamlets to the households in the project areas are not uniform and do not meet the needs of urban development in the current conditions. Only main roads, national roads and roads in urban centers are asphalted.

Access roads to the households are mostly concrete roads (63.3%), followed by asphalt roads (26.5%). 2.6% of households surveyed said that the access roads to their houses are earth ones, 7% answered the access roads are made of stones, gravel, bricks and cement.

Evaluating roads in alleys where the households live shows that: In general, there is a low proportion of households surveyed stated that the alley roads where they are living are in good

conditions, 60% of households surveyed said that the access road to their house is good. There is no difference in assessing the quality of alley roads as "good" in 3 districts. Cai Rang 64, 7%, NinhKieu 64, 5% and BinhThuy 61, 3%. These roads are asphalt and concrete one, so they are evaluated positively by the people. The people surveyed provided the current situation of roads where they live as follows:

Table 2.26. Current situation of roads where households live

Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Often flooded/slushy	Quantity	63	406	43	512
	Rate (%)	10.7%	19.8%	5.5%	5.0%
Narrow	Quantity	170	439	316	925
	Rate (%)	28.9%	21.4%	40.4%	7.0%
Low road surface	Quantity	136	353	104	593
	Rate (%)	23.1%	17.2%	13.3%	7.3%
Rough and difficult to travel	Quantity	69	109	47	225
	Rate (%)	11.7%	5.3%	6.0%	4.6%
without lighting electricity	Quantity	117	135	221	473
	Rate (%)	19.9%	6.6%	28.3%	13.8%

(Source: Socio-Economic Survey, June 2015)

Roads described as narrow take up 27% and are complained the most by the households concerning the quality of roads where they live. followed by 17.3% complained that the road surface is low, 15% stated the roads are often flooded and slushy and 13.8% complained about lack of lighting electricity on the roads.

2.3.4. Water supply situation

When exploring details of the domestic water source of the households in the project area, the survey result showed that: Tap water is available in most households in the three districts accounted for 87.5%. Households tend to increasingly purchase 20l bottled water (29.4% of households surveyed buy 20liter bottled water). The interviews showed that many households doubt of the quality of water they are using, so they tend to purchase bottled water for drinking and cooking. In addition, the purchase of bottled water saves time of boiling water for the households

and this trend increases more and more for well-off households and households live in areas where the water source is not qualified. The 20 liter bottled water saves cooking time considerably. 12.8% of households still use canal water; this is focused in Cai Rang district. The households use canal water mainly for washing vegetables, and dishes. Those who live near canals tend to use this water source, which provides potential water risks affecting the health and causing diseases to the users.

In addition, some households located far from residential areas have difficulty in accessing tap water. Some households, to save water costs, used 2 sources of water for their daily activities. Details of water sources used by the households are as follows:

Table 2.27. Water sources used by households

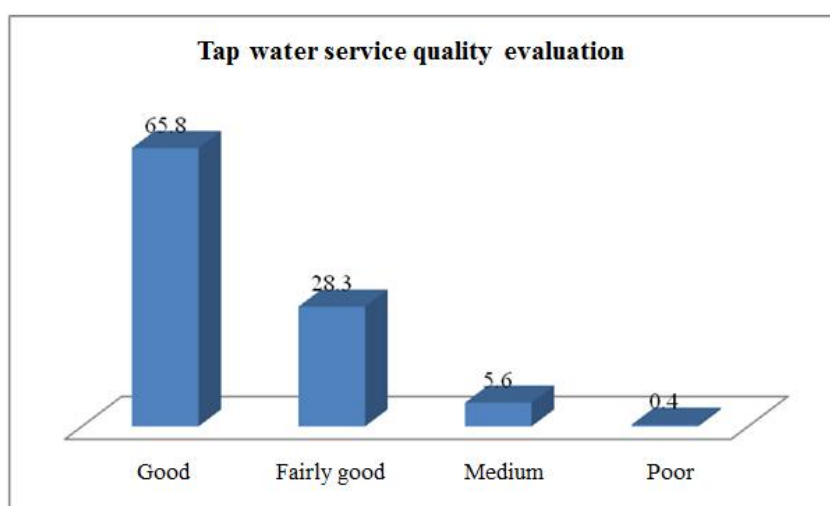
Content		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Use of tap water with a separate water meter	Quantity	405	1956	312	673
	Rate (%)	68.8%	95.3%	9.9%	8.1%
Use of tap water with a shared water meter	Quantity	22	96	49	67
	Rate (%)	3.7%	4.7%	6.3%	4.9%
Use of public tap water	Quantity	56	93	4	53
	Rate (%)	9.5%	4.5%	0.5%	4.5%
Use of water in drilled wells	Quantity	139	18	199	56
	Rate (%)	23.6%	0.9%	5.4%	0.4%
Use of water in dug wells	Quantity	6	5	9	0
	Rate (%)	1.0%	0.2%	2%	0.6%
Use of river/canal water	Quantity	43	19	376	38
	Rate (%)	7.3%	0.9%	8.1%	2.8%
Use of 20l bottled water	Quantity	264	385	357	1006
	Rate (%)	44.8%	18.8%	5.7%	9.4%

(Source: Socio-Economic Survey, June 2015)

The households mainly use tap water for drinking; water in drilled/dug wells is used mainly for bathing and washing clothes. Households having only one source of water use that water for all daily activities. 99.1% of people surveyed stated that the water source they are using is enough.

The amount that the households pay for water every month is estimated to be about 121 thousand dong per household per month (half as low as the amount for electricity). The survey result also showed that there is a difference between groups of households in the volume (m³) of tap water used, the payment amount for tap water as well as payment for purchased bottled water monthly. Details for three groups of households are as follows:

Table 2.28. Volume in m³ of tap water used monthly – payment amount



	Volume in m ³ of tap water used per household per month	Payment amount for tap water per household per month	Payment amount for bottled water per household per month
Poor	12.4	84.0	41.7
Medium	20.1	115.7	50.4
Well off	20.5	155.3	55.4
Total	19.6	121.0	51.0

(Source: Socio-Economic Survey, June 2015)

When assessing the quality of tap water, 65.8% of the households believed that the tap water they are using is good, followed by 28.3% commented as "relatively good". A small percentage of 0.4% commented as "poor". When learning why the households suppose the water source they are using is not clean, the reason is that the water smells of chlorine and is turbid

2.3.5. Drainage and flooding situation

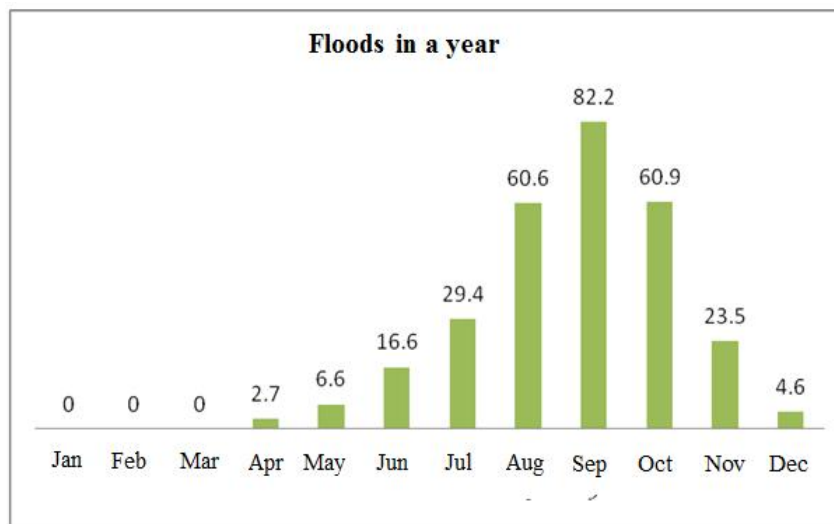
Carrying out the survey on drainage, evaluating existing issues and finding solutions to upgrade and renovate the drainage system upon wishes of the people in the project area is one of the missions set out for the project. During the survey, the surveyors combined in-depth interviews and field observation to have a general assessment of the current situation of drainage in residential areas. The survey results were recorded as follows:

Table 2.29. Description of the current drainage system situation in the project area

Content		District			Total
		Bin hThuy	Ninh Kieu	C ai Rang	
Drained to the combined underground sewer	Quantity	206	1467	71	1744
	Rate (%)	35.1%	71.5%	9.1%	51.0%
Drained to the combined exposed sewer	Quantity	14	216	31	261
	Rate (%)	2.4%	10.5%	4.0%	7.6%
Drained to rivers/streams/ponds/lakes	Quantity	345	351	666	1362
	Rate (%)	58.8%	17.1%	85.2%	93.8%
Self-absorbed wastewater	Quantity	22	16	10	48
	Rate (%)	3.7%	0.8%	1.3%	5.4%
Other	Quantity	0	1	4	5
	Rate (%)	0.0%	0.0%	0.5%	0.1%

Content		District			Total
Total	Quantity	587	2051	782	3420
	Rate (%)	100.0%	100.0%	100.0%	100.0%

(Source:
Economic
2015)



Socio-
Survey, June

51% of households responded that their wastewater flows into the combined sewerage system (solid), which is focused in NinhKieu district (71.5%). In Cai Rang and BinhThuy districts, this proportion is 9.1% and was 35.1% respectively. 39.8% answered their wastewater flows out to rivers, canals. In areas where a complete drainage system is not available, waste water will cause pollution, affecting the living environment of the households. These areas will have potential risks for outbreaks of diseases. 63% of respondents stated that floods still occasionally occur in their living areas. 5.3% stated they occur frequently and 31.7% said floods never occur. Details in the wards are as follows:

Table 2.30. The extent of floods in residential areas

Content		District			Total
		BinhThuy	NinhKieu	Cai Rang	
Frequently	Quantity	11	154	16	181
	Rate (%)	1.9%	7.5%	2.0%	5.3%
Occasionally	Quantity	359	1275	525	2159

Content		District			T otal
		BinhThuy	NinhKieu	Cai Rang	
	Rat e (%)	61.0%	62.1 %	6 7.2%	6 3.0%
Never	Qu antity	219	626	2 41	1 086
	Rat e (%)	37.1%	30.5 %	3 0.7%	3 1.7%
Total	Qu antity	589	2054	7 82	3 425
	Rat e (%)	100.0 %	100. 0%	1 00.0%	1 00.0%

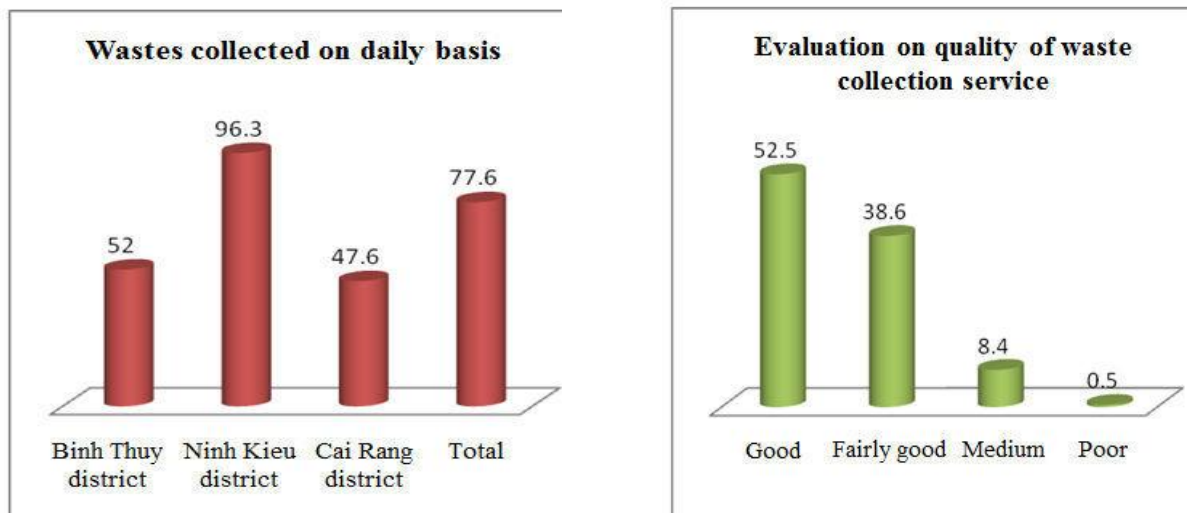
(Source: Socio-Economic Survey, June 2015)

The survey result also showed that floods do not appear from January to March. From April onwards, they tend to appear increasingly. And the flooding peak occurs in September (82.2%). Besides, it is common to have floods in August and October (60.6% -60.9%). Obviously, it can be seen that August, September and October are the months when the households suffer from floods the most.

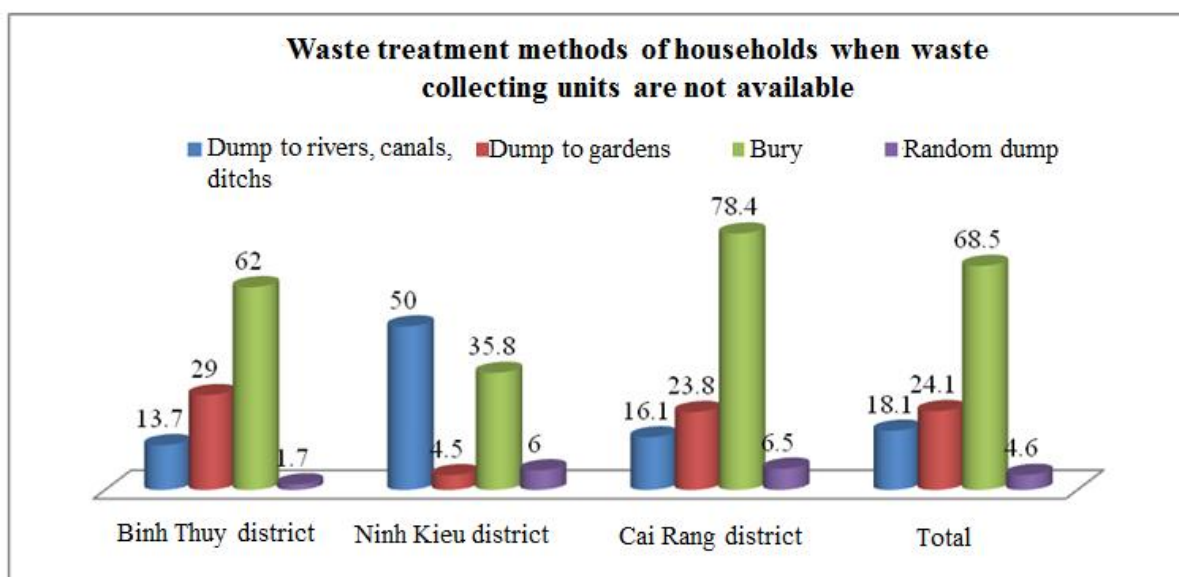
2.3.6. Sanitation and health

Wastes

The survey result showed that 77.6% of households stated that wastes are collected daily. The proportion of waste collection in BinhThuy and Cai Rang districts on daily basis is very low (47.6% and 52% respectively). NinhKieu is the central district, so daily waste collection is performed quite well (96.3%). The fee for waste collection is different in each area. Each household will pay from 10-15 thousand dong per month on average. The collection fee for street households is different from that for households in the alleys. In general, households currently using daily waste collection service and evaluating the service as "good" accounted for 52.5%, 38.6% evaluated it as "relatively good" and 8.4% rated the waste collection service at "average" level. That waste collection service is evaluated not good is due to several reasons, for example, the collecting staff did not collect wastes at the specified time but at a time when the people were not at home. In addition, the wastes gathered at the gathering point are not collected promptly causing pollution to the communities living nearby the place.



In all 3 districts, 23.4% of the households surveyed stated that the wastes are not collected daily. In fact, street households are often provided with waste collection teams. Waste collection for households in alleys encounters many difficulties because the alley roads are undeveloped. Therefore, the households have to find ways to treat their wastes on their own. 766 households surveyed not provided with a waste collection team treated their wastes in different ways and there are some differences in waste treatment among the districts. However, the most popular way is burning and burying the wastes (accounted for 68.5%), followed by dumping out to gardens/dug holes (24.1%) often done by households having large land. Households living near canals, rivers mostly discharged directly into these sources (18.1%). Details are as below:



In-depth interviews and group discussions also provided the comment that waste collection is only good for street households. While uncollected wastes are big concerns of the people living in outlying wards, areas far from the center and from residential areas. Thus, wastes can be seen as one of factors causing pollution and affecting the people's lives when the wastes are not collected properly and at the right place.

Toilets

There are 5 surveyed households sharing toilets with their relatives. 3,425 households have separate toilets. The biggest differences between the well-off households and low-income households in urban areas are differences in income, living standards and education conditions, accessibility to clean water, environment sanitation and health care services, etc. From these limitations, most low-income people in the project area have not yet paid special attention to building of qualified toilets. Ownership of “standard” toilets has been becoming an indispensable demand in a modern and civilized society.

There are disparities between economic household groups with the use of the septic tanks but minor. The proportion of well-off households use septic tanks is higher (90.6%) than poor households (70.9%) and average households (85.5%). Economic factor is the main reason that low-income households have not built septic tanks.

Table 2.31. Categories of toilets owned by households

Items		Households classified by			total
		surveyors			
		Poor	Medium	Well-off	
Septic tank	Quantity	168	2185	567	920
	Ratio (%)	70.9	85.5	90.6	5.4
Semi-septic tank	Quantity	27	237	35	99
	Ratio (%)	11.4	9.3	5.6	7
Two-compartment toilet	Quantity	11	95	20	26
	Ratio (%)	4.6	3.7	3.2	7
Public toilet	Quantity	11	10	2	3
	Ratio (%)	4.6	0.4	0.3	7
Using river/canal/creek	Quantity	17	18	2	7
	Ratio (%)	7.2	0.7	0.3	1
Other	Quantity	3	12	0	5
	Ratio (%)	1.3	0.5	0.0	4
Total		237	2557	626	420

Items	Households surveyed	classified by	total
	Poor	Medium	Well-off
Rate (%)	100	100	100

(Source: Socio-economic survey, June 2015)

The comparison of types of toilets of the wards within the project area also shows the difference. 92.2 % of the surveyed households in Ninh Kieu district used septic tanks whereas the proportion in Cai Rang district is 70%, Binh Thuy district is 82.3%. Specifically, the types of toilets in the districts are as follows :

Table 2.32. Status of using toilet by household economic sector

Items		Districts			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Septic tank	Quantity	482	1892	546	2920
	Rate (%)	82.3%	92.2%	9.9%	85.4%
Semi-septic tank	Quantity	44	82	173	299
	Rate (%)	7.5%	4.0%	2.2%	4.7%
Two-compartment toilet	Quantity	26	46	54	126
	Rate (%)	4.4%	2.2%	6.9%	4.7%
Public toilet	Quantity	13	7	3	23
	Rate (%)	2.2%	0.3%	0.4%	0.7%
Using river/canal/creek	Quantity	9	23	5	37
	Rate (%)	1.5%	1.1%	0.6%	1.1%
Other	Quantity	12	3	0	15
	Rate (%)	2.0%	0.1%	0.0%	0.4%

Total	Quantity	586	2053	781	3420
	Rate (%)	10.0%	100.0%	100.0%	100.0%

(Source: Socio-economic survey, June 2015)

Environmental pollution

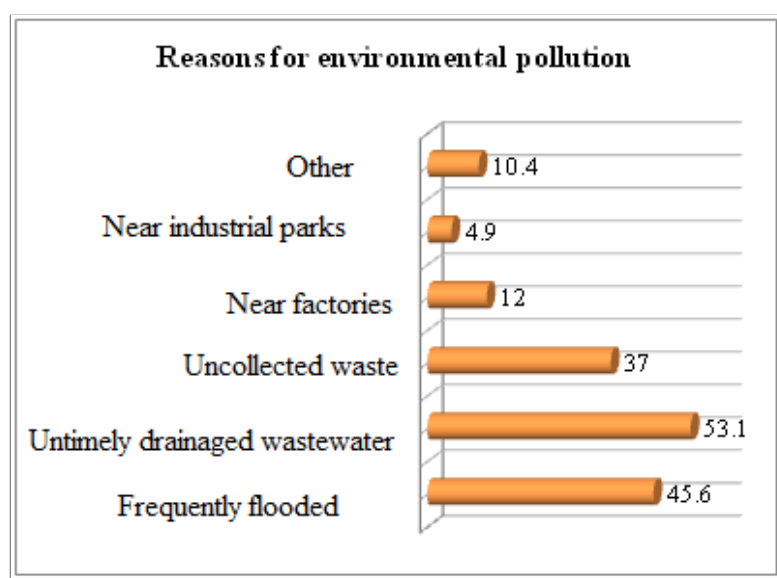
42,5% of households stated that the ambient living environment is polluted. Of which, Cai Rang district accounts for 51.3%, followed by Ninh Kieu district, 45.4% and Binh Thuy district, 36.6%. The pollution level in the districts is insignificant, 20.7%; However, this is also an indication that this trend may increase in coming years unless the mitigation measures of environmental pollution are taken.

Table 2.33. Environmental pollution status

Items	Districts			Total
	Binh Thuy	Ninh Kieu	Cai Rang	
Severe polluted	Quantity	31	194	86
	Rate (%)	14.4%	21.9%	1.4%
Less polluted	Quantity	184	690	316
	Rate (%)	85.6%	78.1%	8.6%
Total	Quantity	215	884	1102
	Rate (%)	100.0%	100.0%	100.0%

(Source: Socio-economic survey, June 2015)

While exploring the causes of pollution, there are many different opinions. Many people stated that polluted living environment is caused by wastewater, garbage and flooding, etc. Of which undrained wastewater accounts for 53.1%. Other causes are frequent flooding (45.6%) and uncollected waste (37%).

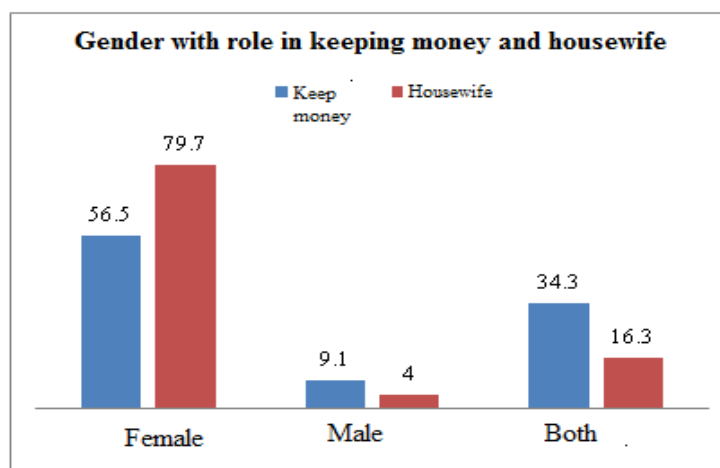


2.3.7. Gender analysis

In families, who make decisions on important issues, own assets and participate in local community activities?

The survey results showed that women play main role in expenditures and housewife. 56.5% of respondents stated that women keep money and 79.7% of respondents stated that women are main housewives. There is also relative but minor gender equality in keeping money (34, 3%) and housewife (16, 3%).

Some family issues are decided by both male and female. 70, 2% of households stated that both wife and husband jointly decide on buying vehicles or houses. 72.4% of spouse decide on borrowing bank's loan or investment, business. 73% of spouses decide on studying and occupation of their children.



Regarding name on the Land Use Right Certificate (LURC), 58.2% of households stated that LURC is under the name of both wife and husband. For 22.1% of LURC is under name of husband only and 19.7% under name of spouse only. The survey results also show gender equality in subscription to their assets (*Expensive furniture, Motorcycle, Refrigerator Washing machine, see table: 2.17*) in households. 60.2% of respondents stated that both genders/spouse own family assets. However, the proportion of male subscribing to the ownership is 24.1%, which is higher than the proportion of female, 15.7%. Namely:

Table 2.34. Subscription to land and assets of family

Items			Districts	Total
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			Binh Thuy	Ninh Kieu	Cai Rang	
Name on LURC	Female	Quantity	66	399	167	632
		Rate (%)	13,7%	20,4%	2,1%	9,7%
	Male	Quantity	129	351	232	712
		Rate (%)	26,7%	18,0%	2,9%	2,1%
	Both	Quantity	288	1202	382	1872
		Rate (%)	59,6%	61,6%	4,8%	8,2%
Subscription to assets	Female	Quantity	49	338	117	504
		Rate (%)	10,1%	17,3%	1,5%	5,7%
	Male	Quantity	145	415	215	775
		Rate (%)	30,0%	21,3%	2,7%	4,1%
	Both	Quantity	289	1199	449	1937
		Rate (%)	59,8%	61,4%	5,7%	10,2%

(Source: Socio-economic survey, June 2015)

The participation in community activities and local organizations show that there is difference between 2 genders. Male often participates in both activities more than female. 54% of respondents stated that males play main role in community activities while the proportion of females is 21.6%. Similarly, the proportion of males participating in local organizations is 54.7% and the proportion of females is 23.4%.

Table 2.35. Gender and participation in activities

Items			Districts			Total
			Binh Thuy	Ninh Kieu	Cai Rang	

Items			Districts			otal
			Binh Thuy	Ninh Kieu	Cai Rang	
Participati on in community activities: community meetings	Female	Quantity	83	498	114	95
		Ratio (%)	17,2	25,5	14,	1,6%
	Male	Quantity	268	1030	438	736
		Ratio (%)	55,5	52,8	56,	4,0%
	Both	Quantity	132	422	229	83
		Ratio (%)	27,3	21,6	29,	4,4%
Participati on in local organizations	Female	Quantity	85	538	131	54
		Ratio (%)	17,6	27,6	16,	3,4%
	Male	Quantity	297	1028	434	759
		Ratio (%)	61,5	52,7	55,	4,7%
	Both	Quantity	101	386	216	03
		Ratio (%)	20,9	19,8	27,	1,9%

(Source: Socio-economic survey, June 2015)

Generally, there is general imbalance in some family activities, ownership of assets and local community activities. Some gender prejudices still exist somewhere in the surveyed households.

The survey results by questionnaire with households and community showed that there is no significant gap between male and female in studying, disease examination and treatment, income and making decision on important issues of family.

Table 2.36. Cross tabulation table between education level and Gender

Content		Gender		Total
		Male	Female	

Content		Gender			Total
		Male	Female		
Illiteracy	Quantity	8	11		19
	Rate (%)	0.4%	0.7%		0.6%
Primary school	Quantity	348	354		702
	Rate (%)	18.4%	23.10%		20.5%
Secondary school	Quantity	655	518		1173
	Rate (%)	34.6%	33.80%		34.2%
High school	Quantity	706	547		1253
	Rate (%)	37.3%	35.7%		36.6%
College/Vocational school	Quantity	36	16		52
	Rate (%)	1.9%	1%		1.5%
University	Quantity	121	80		201
	Rate (%)	6.4%	5.2%		5.9%
Above university	Quantity	18	7		25
	Rate (%)	1%	0.5%		0.7%
Total	Quantity	1892	1533		3425
	Rate (%)	100%	10%		100%

However, job opportunities and adaptability to job change are barriers for women, especially farming women in age of above 40. The project implementation may cause some risks which need to be paid attention, such as jobs for women who have to relocate to new shelter. The fact is that at the river, canal to be dredged, women mainly earn income from unskilled labor (nail, making-up or small business), therefore, the project implementation will increase risks of shortage of jobs for

women. This impact can be mitigated if local women, especially women of affected households are offered with opportunities to participate in the programs of vocational training, capacity building and propaganda campaign to raise awareness of sanitation, traffic safety or prevention of social evils. Job priority to women during the project implementation will reduce unemployment for women and create opportunities to increase income for affected households. During the project preparation, the Consultant should ensure women's participation in community meetings, in-depth interviews as well as household survey at rate of 20-40%. Women's participation during the project preparation will create opportunities to actively participate in engineering design of project works, developing the income restoration program suitably with local situation.

Income from unskilled labor of households in general and of women in particular will be affected during the construction of the project works. Therefore, it is essential to arrange jobs suitable with local women, especially project-affected women. This will enable women to earn income from unskilled labor during the construction. However, job creation is both opportunity and also potential risk due to labor safety and abuse. Some other potential issues including traffic safety, discrimination for unskilled laborers should be considered. Gender issues should be considered as a risk and incorporated in the Resettlement Plan and the Environmental Management Plan of the Project.

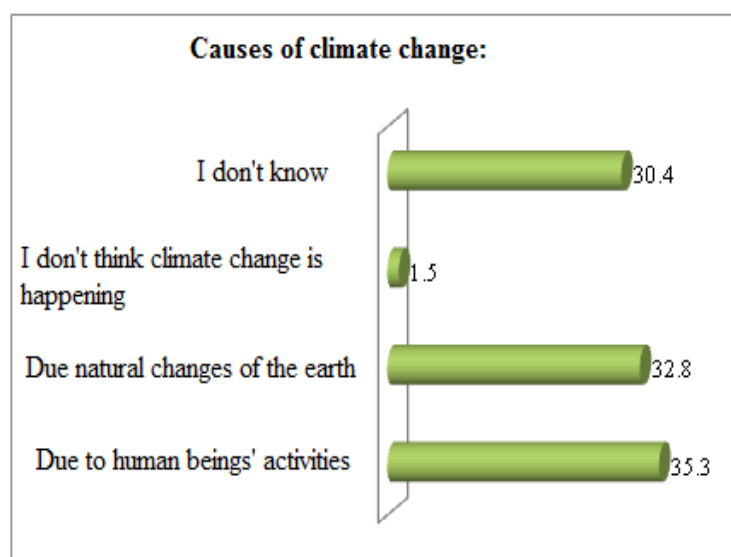
Single women with dependents in project area are those have unstable income from professions like making nail, selling lottery tickets, hairdressing and making-up (*465 persons, in which 311 persons in NinhKieu, 56 person in BinhThuy and 98 person in Cai Rang district*). They are in groups' age of 36-45 and has 1-2 children. They live in grade 4 house in small alleys.

2.3.8. Local authorities' Resilience to Climate Change

Climate change has been occurring in Can Tho in particular and the Mekong delta region in general with significant damages to human and properties. Therefore, the local authorities coordinated with stakeholders to implement projects/intervention actions to raise community's awareness of climate change, thereby giving suitable resilience measures.

2.3.8.1. Community's awareness of climate change

30, 4% of respondents stated that they don't know causes of climate change. The proportions are different among districts, namely 38.4% in Cai Rang district, 29.8% in NinhKieu district and 19.5% in BinhThuy district. 35.3% of respondents stated that climate change is absolutely caused by human beings while 32.8% stated that climate change is caused by natural changes of the earth. The survey figures indicate that awareness and proper understanding of community about climate change is not very high.



43.6% of respondents stated that there have been abnormal changes in climate/weather/tide in places where they are living. The proportion of people giving opinions in BinhThuy is 54.3%, which is higher than NinhKieu (41.6%) and Cai Rang (41%). However, up to 36.7% of respondents said “not know” that there have been abnormal changes in weather/climate/tide in their living places. The abnormal changes which are also called as climate change that people mentioned most include heat waves (52%), heavy rains (39.7%) and tide (37.7%) with frequent occurrence.

Table 2.37. Abnormal changes in weather, climate at localities

Contents		Districts			Total
		BinhThuy	NinhKieu	Cai Rang	
Rain	Quantity	80	335	109	524
	Rate (%)	43.5%	41.1%	34.2%	39.7%
Flooding	Quantity	31	80	12	123
	Rate (%)	14.3%	9.8%	3.8%	9.1%
Storm	Quantity	54	87	4	145
	Rate (%)	24.9%	10.7%	1.3%	10.7%
Heat wave	Quantity	95	358	250	703
	Rate (%)	43.8%	43.9%	78.4%	52.0%
Tide	Quantity	63	305	141	509
	Rate (%)				

Contents		Districts			Total
		BinhT huy	NinhK ieu	Cai Rang	
	Rate (%)	29.0%	37.4%	44.2 %	37.7 %
Landsli de	Quanti ty	10	42	0	52
	Rate (%)	4.6%	5.2%	.0%	3.8 %
Soil subsidence	Quanti ty	5	16	0	21
	Rate (%)	2.3%	2.0%	.0%	1.6 %
Others	Quanti ty	35	36	26	97
	Rate (%)	15.6%	3.3%	6.9%	5.7 %

(Source: Socio-economic survey, June 2015)

2.3.8.2. Climate changes occurred at the localities

The questionnaire mentioned some situations of climate change which happened at localities to know their answers whether they know these situations happened or not. The survey results showed that 37.8% of respondents stated that they don't know climate changes happened in their living places. 37.6% of respondents stated that "climate change situations have not happened in their living places". Thus, only about 24.6% of respondents stated that climate change situations happened, mainly in two recent years. The respondents mentioned to abnormal changes in weather/climate related to "increase in heat waves", (accounting for about 20%) more than other climate changes. It is followed by "tide", "rains/flooding". Some situations of climate change happened over 5 years and mentioned much by the respondents include "tide", "flooding from rivers/canals" and "rains/flooding".

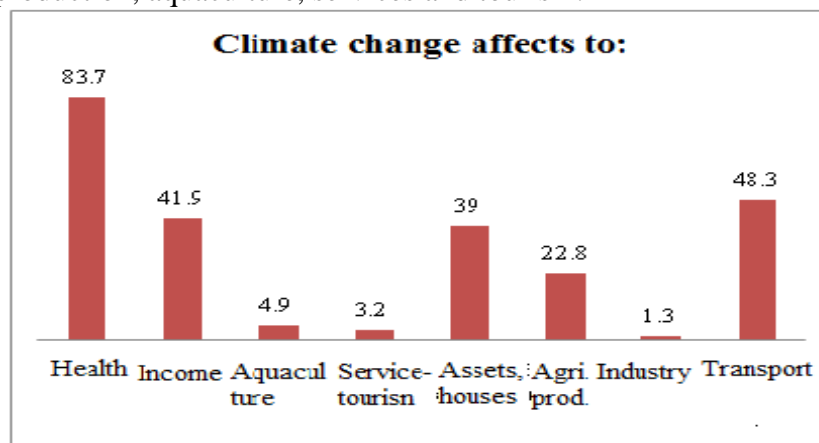
Table 2.2. Climate changes happened at localities

Contents	Not know	Not happened	Belo w 1 year	Fro m 1-2 years	Fro m 3-5 years	Ove r 5 years
Flooding from rivers/canals	33.2	41.5	6	7.7	4.1	7.5
Rains/floodi ng	34.3	37.6	7.9	9.1	5.8	5.3
Sea level rise/tide	38.1	30.4	11	7.6	4.7	8.3
Landslide of canals/creeks/rivers	38.3	43.5	7.1	5.6	2.1	3.4

Shortage of water	43.3	48.7	1.5	4.2	0.8	1.6
Increase in heat waves	33.5	13	19.4	19.9	9.7	4.4
Soil subsidence	44.2	48.3	2.1	0.5	1.1	3.8
Total	37.8	37.6	7.9	7.8	4.0	4.9

(Source: Socio-economic survey, June 2015)

The above-mentioned climate changes caused significant influences on life of people. 83.7% of respondents stated that climate changes affect to health. It is followed by 48.3% of respondents stated that climate changes affect to transport. 41.9% stated that climate changes affect to income of people. 39% stated that climate changes affect assets and houses of households, especially in case of heavy rains, storm water overflows to houses. Besides, climate changes also affect agricultural production, aquaculture, services and tourism.



2.3.8.3. Climate change resilience

What did local people do for adapting to climate changes which happened in their living places?

There are 1,547 of 3,425 households (accounting for 56.2%) sought to solutions to adapt to climate change. The survey results show that the situation of flooding and high tide tend to increase, leading to the flooding in many households. Therefore, 56.2% of households sought to adapt to climate change by raising the floor to limit flooding. Although NinhKieu district is a center district of the city, the number of households who sought to this solution was relatively high, accounting for 60% whereas the proportion in BinhThuy district was 48.7% and Cai Rang district was 52.1%. It is followed by the proportion of households seeking to buy more electric fans to response to the increasing heat waves, accounting for 44.7%. The solution of buying air-conditioners is also mentioned by well-off households. Housing conditions are not suitable to the terrain of living places, up to 8.1% of households had choice to relocate to other places to avoid the phenomenon of climate changes. Specifically, the surveyed households gave the following solutions to adapt to climate changes:

Table 2.38. People's solutions to adapt to climate change

Solutions		District			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Raising floor of houses	Quantity	134	567	170	771
	Rate (%)	48.7%	9.7%	2.1%	6.2%
Buying more fans	Quantity	107	433	152	592
	Rate (%)	38.9%	5.7%	6.6%	4.7%
Buying air-conditioners	Quantity	33	117	14	64
	Rate (%)	12.0%	2.4%	3.4%	0.6%
Equipping more water storage tank	Quantity	1	37	6	44
	Rate (%)	0.4%	3.9%	1.8%	0.8%
Relocating to other places	Quantity	72	47	7	126
	Rate (%)	26.2%	5.0%	2.2%	11.1%

(Source: Socio-economic survey, June 2015)

Therefore, there are still about 45% of surveyed households (1,878 households) have no solution to adapt to climate changes. The survey also sought to understand whether what people will do in case of climate change. The survey results show that 42.9% of surveyed households stated that they would have solutions to adapt to climate change while about 60% of surveyed households stated they “have no solution” or “don’t know” how to and " adapt to climate change. Specifically in the following districts:

Table 2.39. People will adapt to climate change

Answers		Districts			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Would have	Quantity	119	515	172	806
	Rate (%)	37.9%	46.5%	37.7%	42.9%
Have no	Quantity	110	354	115	579

	y				
	Rate (%)	35.0%	31.9%	25.2%	30.8%
Don't know	Quantit y	85	239	169	493
	Rate (%)	27.1%	21.6%	37.1%	26.3%
Total	Quantit y	314	1108	456	1878
	Rate (%)	100.0%	100.0%	100.0%	100.0%

(Source: Socio-economic survey, June 2015)

Some solutions gave by the surveyed households to adapt to climate change are as follows:

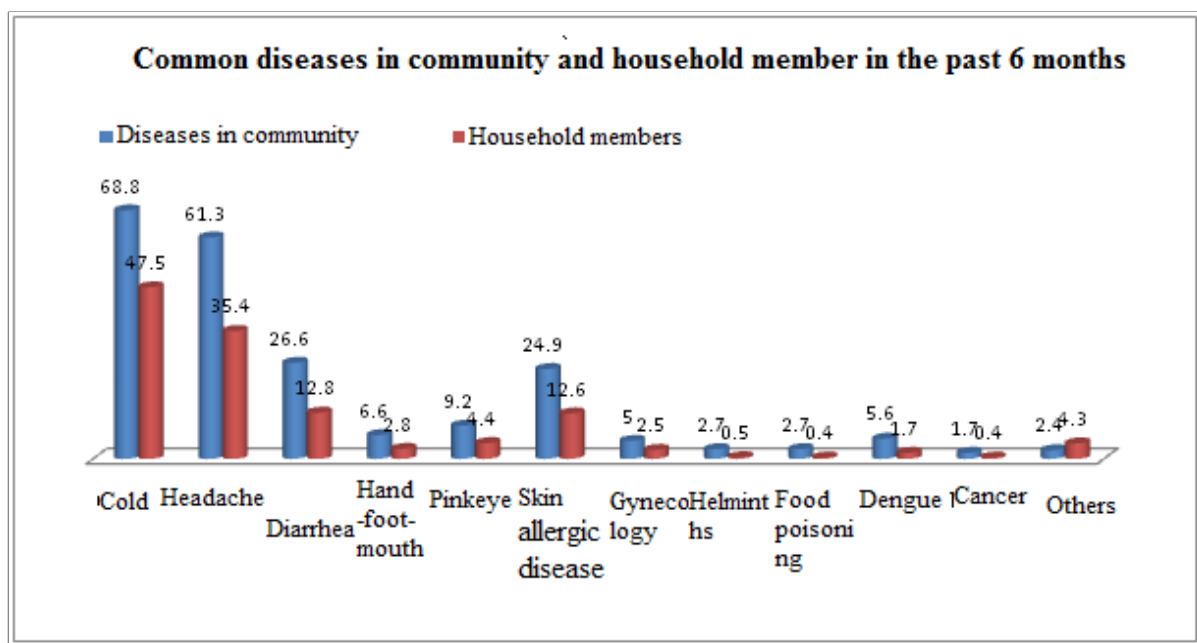
- Avoid or limit going out in the sun or wear masks and sunscreen clothes
- Strengthen environmental protection. No littering, throwing garbage and dead animal body into canals
- Save electricity, water and gasoline when using
- Build permanent houses or relocate to new places
- Buy more appliances such as fans, air conditioners, water tanks
- Lift up the house floor to avoid flooding and high tide
- Participate in training courses in climate change
- Jointly discuss solutions to prevent climate change
- Plant more trees in households and on roads. Jointly clean inside households and outside lanes.
- Save money to prevent natural disasters

2.3.9. Community health

Assessment of health care services

❖ **Diseases**

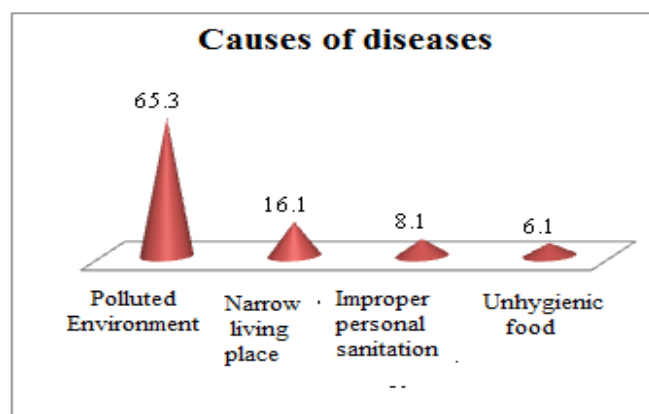
Shortage of clean water, occurrence of flooding in many places, uncollected garbage in residential areas, etc. are causes of the spread of epidemics, threatening to human health. Hundreds of people in the city get common diseases such as diarrhea, cold, fever, dengue fever, hand-foot-mouth and pinkeye every year. The main causes of these diseases are the disease-transmitting parasites and insects grow in polluted water environment, and then transmit to humans by the ways of eating, drinking and life activities. Here are common diseases in the locality through the outlook of surveyed people and some diseases that household members got in the past 6 months.



Among common diseases in the community, the majority is still cold and headache with the respective proportions of 68.8% and 61.3%. It is followed by the diarrhea, accounting for 26.6%, skin and allergic diseases accounting for 24.9%. The pinkeye, hand-foot-mouth disease accounted for 9.2% and 6.6%, respectively. Besides, the unfresh living environment and unqualified water sources also cause the diseases of dengue and gynecology with the respective proportions of 5.6% and 5%.

The survey results also indicated similar figures of diseases in household members in the past 6 months, namely:

- 47.5% got cold
- 35.4% got headache
- 12.8% got diarrhea
- 12.6% got skin, allergic diseases
- 4.4% got pinkeye
- 2.8% got hand-foot-mouth disease
- 2.5% got gynecological disease.
- 1.7% got dengue



65.3% of surveyed households said that these diseases are caused by water pollution. It is followed by narrow living places, accounting for 16.1%, improper personal hygiene accounting for 8.1% and unhygiene foods accounting for 6.1%. Besides, the surveyed people also gave other causes such as muddy roads, untreated wastewater, weak sense of community, etc. Therefore, the investment in project items is essential that people are expecting.

❖ *Assessment of health care services*

Generally all wards in the survey have standard medical stations. This is considered as the initial route of health care for people. However, the people seldom come to the medical stations for examination and treatment of diseases. They only come to the medical stations for examination of common diseases and vaccination or periodical examination for children. In case of getting

diseases, people often go to prestigious institutions, hospitals and polyclinics rather than access to medical stations.

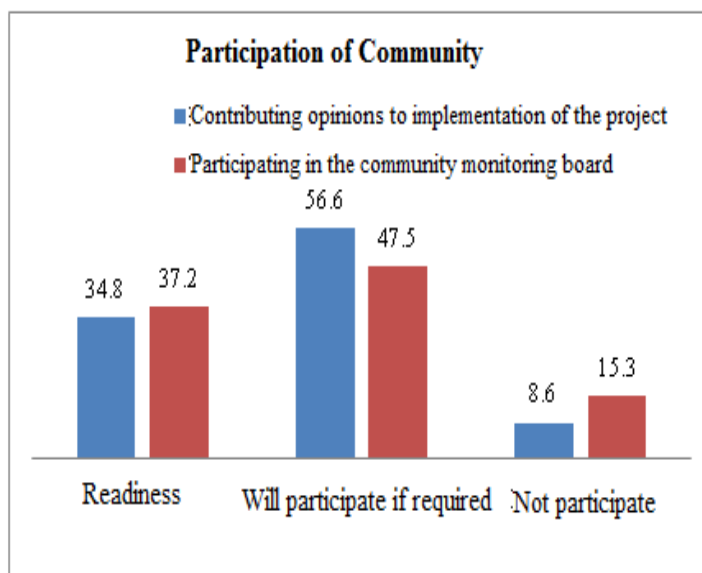
Together, the survey also showed that infrastructures of the medical stations have been degraded in some wards such as Hung Phu, Hung Thanh. The authority of Le Binh ward stated that *“The medical station was built for a long time and now degraded. Besides, due to the upgrading of some roads such as Tran Hung Dao road, floor of medical station is about 1m lower than road pavement and the medical station don’t meet demands of disease examination and treatment. Therefore, investment in building new medical station to meet demands of health care of people is essential”* (In-depth interview with Leader of Le Binh ward).

Assessment of potential project impacts on community health

❖ People’s readiness to participate in the project



For any development project, the community’s participation in the implementation of project, the sustaining and promotion of the project efficiency are keys to the success and sustainability of each project. The survey results showed that in the project area, all households support and desire the project to be implemented early to avoid the situation of suspended project. The rate of households not participating in the project activities is insignificant.



While exploring the possibility of the households for the contribution to the project, households gave difference forms of contributions, like cash contribution, voluntary donation of land, yard, fence, roof patio, fruit trees and crops, etc. depending on the affordability of households. The survey results also showed that the participation rate of people in construction of the project is very high. 35.4% of people are willing to contribute by labor, 26.6% contributes in cash and 6.8% are willing to donate land for construction of the works.

Table 2.40. Community’s participation in the project

Forms of contribution		Districts			Total
		Bi nhThuy	Ni nhKieu	C ai Rang	
Financial contribution to construction of the works	Quantity	110	670	131	111

Forms of contribution		Districts			total
		BinhThuy	NinhKieu	Cai Rang	
	Percent (%)	18.7	32.6	16.8	6.6
Land donation for construction	Quantity	50	104	80	34
	Percent (%)	8.5	5.1	10.2	.8
Contribution by workdays	Quantity	244	630	340	214
	Percent (%)	41.4	30.7	43.5	5.4
Other opinions	Quantity	10	112	28	50
	Percent (%)	1.7	5.5	3.6	.4
No contribution	Quantity	175	538	203	16
	Percent (%)	29.7	26.2	26.0	6.7
Total	Quantity	589	2054	782	425
	Percent (%)	10.0%	10.0%	10.0%	00.0%

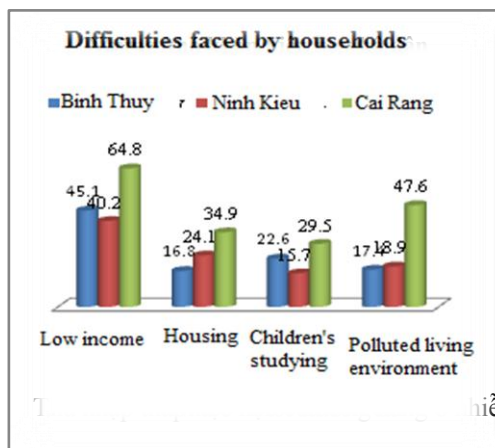
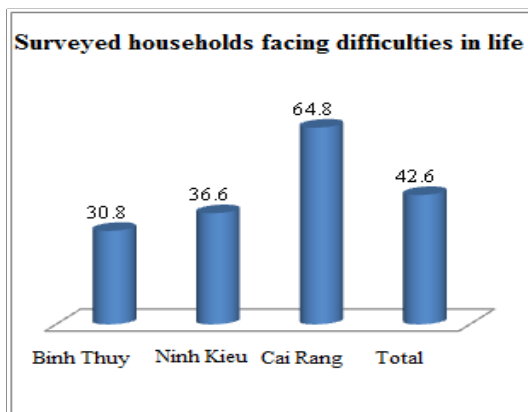
(Source: Socio-economic survey, June 2015)

The desire of the people is to contribute their workdays and express their points of view in designing the project suitably with the actual conditions of locality as well as consistent with the needs and aspirations of the people. The readiness to contribute opinions of poor households is lower than well-off, rich and medium households. This suggests the relevant individuals and organizations to motivate, encourage poor households to contribute their opinions for the project during the construction of project because the poverty reduction is one of the most important objectives of the development projects in general and infrastructure development projects in particular.

Demands and proposals from community

Difficulties in life and demands of borrowing loans

42.6% of surveyed households stated that their life is very difficult, of which Cai Rang district accounts for 64.8%. It is followed by NinhKieu district, 36.3% and BinhThuy, 30.8%. Main difficulties that these households are facing are that 46.9% of households have low income. It is followed by the situation of housing, accounting for 25.6% and unguaranteed living environment accounting for 25.7%. Besides, 20.1% of households stated they are facing difficulty in their children's studying.



87.4% of surveyed households stated that they have needs for borrowing loans for economic development, of which 25.9% of households have needs of loan level from 40-50 million per household, which is higher than the other loan levels. Loan level under 10 million accounted for only 7.5%. Therefore, we can see that households have needs for borrowing high loan level is popular. Many surveyed households also expressed that it is difficult to invest for economic development with low loans. They hope loan's interest rate is reasonable equal to the policy bank's interest rate (0.6 % per year) with the loan duration from 3 to 5 years and payment of interest rate every 3 months. Loans are expected to invest in cattle-breeding and small business, accordingly help households to feel secure when borrowing and payment of loans. The levels of loans in the surveyed districts are as follows:

Table 2.41. Households' demands of borrowing loans

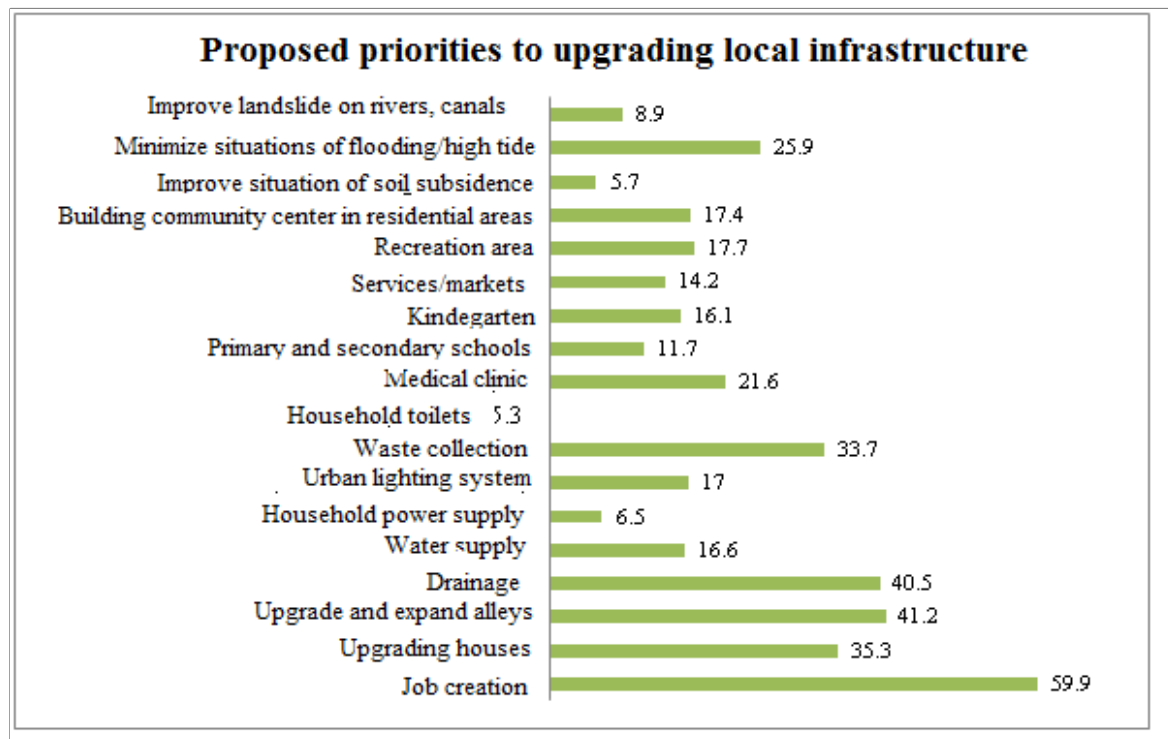
Contents		Districts			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
Below 10 million	Quantity	55	87	81	223
	Percentage (%)	11.8%	5%	10.4%	7.5%
From 10 – 20 million	Quantity	31	253	96	380
	Percentage (%)	6.6%	14.5%	12.4%	27.1%
From 20 – 30 million	Quantity	56	298	117	471
	Percentage (%)	12%	17.0%	15.1%	57.4%
From 30 – 40 million	Quantity	63	223	121	407
	Percentage (%)	13.5%	12.8%	15.1%	50.9%

Contents		Districts			Total
		Binh Thuy	Ninh Kieu	Cai Rang	
	t (%)	%	%	6%	3.6%
From 40 – 50 million	Quantity	76	463	237	776
	Percentage (%)	16.2%	26.5%	30.5%	25.9%
Others	Quantity	187	424	124	735
	Percentage (%)	40%	24.3%	16%	4.6%
Total	Quantity	468	1748	776	2992
	Percentage (%)	100%	100%	100%	100%

(Source: Socio-economic survey, June 2015)

Priorities to investment in local infrastructure

The chart below shows the investment priorities at the locality. Job creation is highest desire of the



surveyed people, accounting for 59.9%. It is followed by the desire of alleys to be expanded, accounting for 41.2%. While 40.5% of surveyed people desired for the building, renovation and upgrading of the existing drainage systems to prevent flooding in case of rains or high tide. At

many places in the city, the situation of high tide caused great influences to the travel as well as environmental hygiene at living places of people. Together, the 4th priority mentioned by 35.3% of surveyed people is the situation of degraded houses. The 5th priority to be mentioned by 33.7% of surveyed people is the waste collection in some places; especially the alleys and the wards far from the city's center have not been served by the waste collection system, leading to bad smelt, air and waste pollution, affecting health of local people.

Suggestions for the Project

❖ **Suggestions from the local people**

❖ The fact shows that in Can Tho city, there are many projects under the construction. However, the implementation of these projects is facing several difficulties; therefore, the progress of implementation of projects is often slower than plan. Many surveyed households seem in the mood of losing belief in some projects. Therefore, they also came up with suggestions for such projects, namely 64.6% of surveyed households suggested the projects to be implemented soon to avoid the situation of suspended project, 61.7% suggested adequate compensation payment/assistance for affected households, and 60.8% desired the quality of works to be guaranteed.

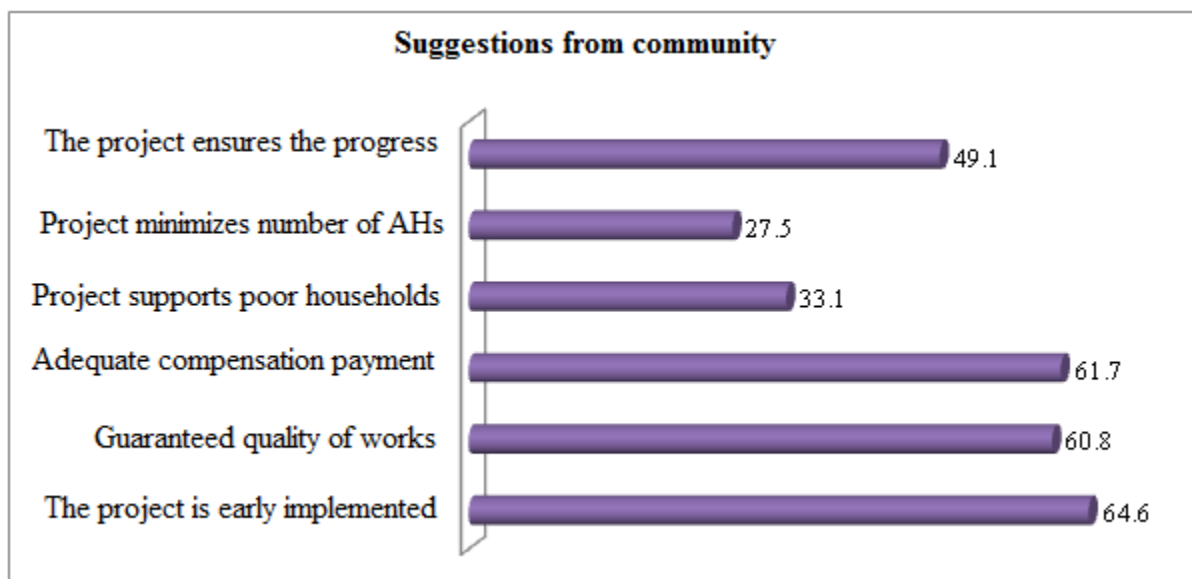


Table 2.42: Suggestions from the local authorities

No.	Wards	Suggestions
1	Thoi Hoa	<ul style="list-style-type: none"> - The projects on building embankment for consolidating NH91. - Compensation and support policies for affected households. - Mitigation measures of environmental pollution during the construction - Some places require investment in drainage and traffic systems in the future, especially areas remote the center.
2	An Thoi	<ul style="list-style-type: none"> - Invest the project of dredging canals - Ensure the construction time not to affect domestic life of local people.
3	Long Tuyen	<ul style="list-style-type: none"> - Consolidate embankment and rebuild road to limit subsidence. - Dredge and clear canals. - Absolutely support the implementation of project - Suggest the Client to absolutely ensure labor safety and shield the works during the construction, ensure traffic safety during the transport of building materials to the site, fire prevention and fighting as well as security at the construction site. - Suggest the Client to pay attention to environmental impacts during the construction, including domestic waste of workers, hazardous waste of the works under the construction, then take measures to handle smoke, dust and noise. - Suggest the Client to comply with commitments on measures to prevent and mitigate adverse impacts on environment.
4	CaiKhe	<ul style="list-style-type: none"> - Suggest considering for upgrading the drainage systems. - Renovate Chum Hoi creek. - Upgrade branch alleys with synchronous solutions.
5	An Hoi	<ul style="list-style-type: none"> - Upgrade and renovate the creek route 53 on Hoang Van Thu road. - Whole drainage system - Whole electric system (it is required to gather the electric and telephone systems together to avoid the current situation same as spider-webs. - Upgrade the Green Leave Kindergarten.
6	An Hoa	<p>Finish the construction of Rach Sao route as this section greatly affects to the residential area. Speed up the progress and ensure quality of the works.</p>
7	XuanKhanh	<p>Suggest the project to be implemented early so that local people stabilize their life soon.</p>

o. N	Wards	Suggestions
8	Hung Loi	<ul style="list-style-type: none"> - Suggest urgently implementing the projects under the progress. - Continue to review and upgrade the remaining areas. - Abolish the delayed and unimplemented planning. - Propagandize and educate the sense of preserving environmental sanitation.
9	An Binh	<ul style="list-style-type: none"> - Need a new location for building the information house. - Need to renovate roads and alley routes (there are 13 of 56 alleys scattered on main roads and canals). - Need to inspect the water sources discharged to some areas near DauSauBridge. - Upgrade the drainage system, culverts and drains to limit flooding
0 1	Hung Thanh	<ul style="list-style-type: none"> - Suggest the local unskilled labor source to have opportunities to participate in works which do not require high techniques, like masons or other workers. - Interest and urge Contractors to perform the construction to ensure progress regularly inspect the compliance with laws on environmental protection, fire prevention and labor safety.
1	Le Binh:	<p>With the real demand of the locality, due to the restricted funding sources, therefore, we wish the competent authorities to allocate capital for investment in the above-mentioned items to contribute to completing the task of local economic, cultural development so that the society becomes more and more prosperous.</p>

CHAPTER 3: MAIN FINDINGS

3.1. Main social issues

Based on the socioeconomic surveys conducted and on the socioeconomic characteristics of the population, the main social issues related to the project are: i) involuntary resettlement; iii) loss of livelihoods; iii) impacts on vulnerable groups; iv) gender issues; v) safety issues and vi) health issues.

❖ *Involuntary Resettlement*

Investment programs often needs land acquisition and the relocation of population. Thus displacement of population may create social impacts and social disruption. Impacts linked to the projects are: Loss of assets or ability to access to assets; Loss of income sources or means of livelihood, whether people affected should or not to move to another location; and be restricted access to the area is required by law or protected areas detrimental to the livelihoods of those affected.

According to the survey and initial assessment, the implementation of 02 components of the project is expected to have 4,539 affected households, of which 1,814 resettled households, 634 severely-affected households and 709 households with small business affected (see Table 3.1).

A resettlement plan (RAP) will be prepared in compliance with World Bank policy for involuntary resettlement and law of Vietnam to minimize impacts on the affected households.

Table 3.1. Information about the land acquisition of 02 project components¹¹

Type of asset		Unit	Total		Component 1		Component 2	
			Quantity	No of APs	Quantity	No of APs	Quantity	No of APs
Land								
Non-Agricultural land	Residential land	m²	369,517	3,598	222,830	2,357	146,686	1,241
	Traffic land	m²	144,668	10 organizations	111,903	7PPC	32,765	7PPC
	Canal land	m²	44,741	10PPC	34,281	7PPC	10,460	6PPC
	Grave land	m²	3,184	2PPC	-	-	3,184	2PPC
	Non- Agricultural land	m²	27,917	38 companies	27,797	6companies	120	2companies
	Other land	m²	35,909		30,015	6PPC	5,894	5PPC
Agricultural land	Garden land	m²	96,988	251	41,383	188	55,604	63
	Yearly land	m²	40,978	64	24,110	38	16,867	26
	Perennial land	m²	684,394	777	205,886	337	478,508	440
Total			1,448,295		698,205		750,089	
Total of DPs								
	Total of DPs	HH		4,539		2,858		1,681
	Relocated DPs	HH		1,814		1,271		543
	Seriously DPs (losing of business or productive land)	HH		634		265		369
	Affc	HH		709		472		237
Vunerbale				444		200		244
	Woman headed HH	HH		349		150		199
	Ethnic HH	HH		11		6		5
	The handicapped	HH		6		4		2
	poor HH	HH		35		22		13
	Lonely elderly HH	HH		10		5		5
	Policy household	HH		33		13		20

¹¹ Source: RP report

❖ **Loss of livelihoods**

A total of 634 HH will lose more than 20% of their productive land, (10% for vulnerable HH) and 709 households will have their small business affected (580 registered and 129 non-registered and 573 will have to relocate). 35 companies (mainly construction material companies) will also be affected as well as 1 market. This will result in impacts on the livelihood of the affected communities

Loss of livelihoods for HH losing productive land and HH losing small business will be addressed through the preparation and implementation of an Income Restoration Program (IRP) as part of the RP.

A market, Tan An market, will be completely affected due to the construction of Can Tho embankment. Under the project, a new market will be built and shopkeepers in Tan An market will be relocated only once the new Tan An market will be completed.

Table 3.2: Summary of land use planning for new Tan An market

o.	Components of land	Unit (m ²)	Rate (%)
	Indoor sale area	3,247	51.6
	- Sale area	2,354	
	- Indoor walkway area	893	
	Land for building internal road	634	10.1
	Outdoor area	2,412	38.3
	- Outdoor sale area	1,787	
	- Parking area	520	
	- Area for electrical substation, power, pumps	30	
	- Public WC	33	
	- Temporary garbage-gathering area	42	
	TOTAL	6,293	100.00

Location of the land for building Tan An market is on Ninh Kieu bank of Can Tho, the main side of the land faces with Hai Ba Trung road, in between the intersection point with Phan Dinh Phung road and the intersection point with Ngo Duc Ke road and the land's boundary is as follows: Northeast: bordering a ward's information house and some houses of local people, southeast: bordering Can Tho river, southwest: bordering houses of local people and northwest: bordering Hai Ba Trung road.

Table 3.3 Summary of area- number of blocks for commodities

o.	Commodities	No of Blocks	Notes
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	All lines of merchandise, groceries, dry goods 512m ²	124	
	Fruit 228m ²	56	
	Raw and fresh goods 808m ²	200	
	Vegetables 808m ²	200	
	Food and beverage 920m ²	92	
	Soft drinks service on rooftop 414m ²		
	Not fixed business	About 250	Day and night
	TOTAL	922	



Technical design of Tan An market



Regarding the companies, Can Tho City will assist them to relocate in a suitable location in order to continue bus

❖ ***Vulnerable HH***

- ***Landless HH along Rivers and Canals***

13 canals will be dredged at Ninh Kieu district and the project will also need the clearance of Can Tho river embankments. These are places where poor and low income people live with unstable income from unskilled labor or hired labor. Their main occupation is motorcycle taxi, selling lottery tickets, nail or hired labor with unstable income.

Their houses are mainly temporary ones, encroaching into canals/River or housing with a small area, but the number of household members is quite large. Total household affected by Can Tho embankment and dredging of canal system is about 2,858 household, in which 1,271 relocation household, 265 seriously affected households (losing more than 20% of total landholding), 472 affected business household. Among this total a large number (219) has no rights or claims on land. Based on the resettlement policy for the project they will be entitled to a minimum plot of land in a serviced resettlement site and will take arrangement to pay for the land on a long period. This will guarantee security of tenure for landless HH.

- ***Ethnic Groups***

In the 03 affected districts, there is no community or cluster of ethnic minorities living separately; according to the data from the RP, only 11 households from ethnic groups, living integrated with the Kinh majority, will be affected. Hence there is no need for a specific action plan for this group. However socioeconomic data shows that this group tends to be poorer than the Kinh. Support to ethnic groups is already included in the Resettlement Plan (communication with focus on vulnerable groups including ethnic groups, special cash assistance). No other measure will need to be implemented.

- ***Women's Head of HH with Dependents***

465 women head of households with dependents have principal income from hired labour, their income is not stable, although local authorities provide them some vocational training (nail, makeup, hairdressing) through government programs with assistance of 10,000 VND/session/trainee with 45-60 days training period. However, practical skills from this training and the ability to find a job are limited. Therefore,

effectiveness of those training programs is very low. Credit program is a better option for livelihood restoration.

❖ ***Gender Issues***

The CTUDRP can impact differently on men and women. Women's livelihoods are often located in the informal sector (small business) where impacts can often be overlooked. The project is expected to have significant negative impacts on the livelihoods of women as well as men and also on livelihoods which are not formally registered (especially for HH living along the Can Tho River). The compensation process associated with land acquisition has also the potential to alienate women from household assets if compensation is not made to both spouses heading households. Female-headed households face additional challenges associated with resettlement, especially when they are reliant on extended family and social networks for the care and socialization of children.

Women are also more susceptible to the risks of HIV/AIDS infection compared to men. Women are physiologically more susceptible to infection through sexual contact than men. Partnered women are also less able to reduce their risks of infection simply by modifying their own behavior as they are reliant on their partner's behavior to avert the risk of infection.

To address these issues, the Resettlement Plan includes an Income Restoration plan with specific focus on small business affected. A Gender Action Plan (GAP) has also been prepared (see Annex 1). The objectives of the GAP are: (1) provide opportunities for and strengthen the role of women in local economic activities; (2) disseminate information about urban environmental sustainability and social risks to men and women; and (3) increase female representation in the sector and in decision making positions.

❖ ***Safety Issues***

During the construction, the transportation of materials may increase risks of traffic accidents and hinder daily travel of residents and damage to local roads, waterway, increase conflicts in using water for irrigation and domestic purposes. To minimize impacts during the construction, the contractors should disclose the construction schedule, at the same time; install fully signals at the construction areas to ensure safety for residents. The ESIA includes measures to minimize impacts on safety.

❖ ***Health Issues***

Beside environmental impacts to community health during the construction, the project implementation also causes risks of spread of infectious diseases.

Risks of spreading Sexually Transmitted infections(STIs) may be caused by the project for the following reasons: (i) existing dissemination and infection rate; (ii) community's knowledge about infection ways and prevention measures; and (iii) presence of international/outsourced laborers. In the fact, the results of consultations at project districts/communes showed that local people are regularly provided with information about HIV/STIs by medical officials in coordination with Family planning division/ Ward/commune Women's Union. In addition, provision of condoms and disseminations of information about HIV/STIs will be provided.

Mitigation measures of risks of spreading STIs and HIV during the construction of project items should be taken. These measures include raising awareness of STIs and HIV for benefitted/affected communities as well as workers. The project should also link to existing initiatives to raise awareness of prevention measures. These prevention measures include:

- The construction contract will require the contractors to establish a human force to participate in STIs, HIV/AIDS prevention seminar hold by a service provider approved. Seminars will be hold for laborers before commencement of the works;
- Providing condoms at the construction site;
- Basing on community to raise awareness of risks of spreading of STIs and HIV, reproductive health, safe sex and human trafficking.

3.2. Potential Project Impacts and Social Risks

This section examines the potential project impacts for the two projects' components. Social impacts, both positive and negatives and social risks are identified in the following tables for the two components of the Project: i) Flood Control and Sanitation Component and ii) Urban Corridor Development Component.

3.2.1. Flood Control & Sanitation Component

The positive and negative impacts and the social risks associated with the Flood Control and sanitation component are presented in the table below.

Table 3.4: Potential Impacts and Social Risks for Flood Control & Sanitation Component

o.	Construction	Positive Impacts	Negative Impacts and Social Risks
	Can Tho River Embankment lengthened 5.5 km with anti-tidal elevation and combined gentrification.	<ul style="list-style-type: none"> - Improve public health and living conditions in the project area, especially for encroachment living households, pollution of Can Tho River in areas adjacent to existing open channels and drains and lakes in heavy pollution; - Improve the environment and reduce nuisance (odor and flies) for households living along the canal route / locks; - Minimize flooding for households and commercial areas along two Can Tho riversides; - Safety issues along two river banks is secured; - Be potential to increase the income in the construction phase (thanks to the sale of goods) and have a chance to enhance their income by protecting assets and commercial goods, and the continuity of business operations during the flood season; - Increase the area for opening food and beverage stores and promote tourism development; - Open space along the 2 waterfronts for local recreation and exercise; - The opportunity to participate in the project category as workers, odds, etc. 	<ul style="list-style-type: none"> - Land acquisition for project construction will affect the community living conditions; - Affect the movement of people during construction; - The risk of impoverishment for occupied households living in the Can Tho canals and river embankments; - The risk of accidents on workplace safety without adequate warning systems; - Increase social ills without suitable livelihood recovery programs; - Loss of family income for those traders who are selling at the market Binh, An Lac and Tan An, and some business households in Hung Loi Ward (expected to be QuangTrung bridge); - The relocation of the former residence to the new place will affect people with incomes from motorcycle/car path, motorbikes, manicure, hairdressing, etc.
	2 tide sluices with combined docks at CaiKhe&DauSau canal on Can Tho River.		
	Construction of culverts/valve anti-tide along Cai Son, MuongKhai and the opening seam CMT8 (Highway 91) and DT918 to a closed system.		
	Upgrading and renovating 17 channel/canal level 1 to increase drainage, increase storage capacity while rain and high tides, improve sanitation, and connect works of Capital Improvement Project VUUP 1 and 2.		
	Renovate the drainage system in the central urban areas of NinhKieu, the total estimated 27 roads with a length of approximately 11km of NinhKieu core area and about 10km to the remaining areas of the basin.		
	Construction of 2 conditioned water reserved lakes with a total area of 12ha		

3.2.2. Urban Corridor Development Component

The potential positive and negatives and the social risks associated with the urban corridor development are presented in the table below.

Table3.5: Potential Impacts and Social Risks for Urban Corridor Development Component

o.	Construction	Positive effects	Negative effects
	Construction of QuangTrung bridge (Bay 2)	<ul style="list-style-type: none"> - Access to markets and primary social services (health, education) and urban employment opportunities is improved; 	<ul style="list-style-type: none"> - Land acquisition for project construction will affect the life wave, the livelihoods of local people (it is estimated there are 1,681 affected households, including 534 relocated households, 369 severely-affected households and 237 affected business households.
	Construction of Tran Hoang Na bridge	<ul style="list-style-type: none"> - Reduce flooding because the drainage system is improved (personal and public health protection); 	<ul style="list-style-type: none"> - The risk of accidents on workplace safety without adequate warning systems;
	Construction of opening beam of CMT8 to provincial street 918	<ul style="list-style-type: none"> - Increase income from production and marketing of agricultural products trade, help households invest more for housing and health care, thereby improving the living standards of the people.; - Small business of households bring higher profits due to traffic and local income increase; - Increase ability to access vocational training and employment opportunities for young workers; - The transport system connecting the inner city to the suburbs of Can Tho city, and urban infrastructure to be upgraded to modern condition will bring the efficiency of production and consumption of goods due to better markets accessibilities as well as real estate prices in the suburbs will be improved. 	<ul style="list-style-type: none"> - Affect the movement of people during construction; - An increased risk of traffic accidents when traffic flow moving from bridge/new lines formed without these programs providing skills training on road safety; - Increase social evils if there is no suitable livelihood recovery programs; - Loss of family income for those traders who are selling at the ward Hung Loi (expected to be QuangTrung Bridge). - The relocation of the former residence to the new place will affect people with incomes from motorbike/car patch, motorbike taxi drivers, manicure, hairdressing, etc.

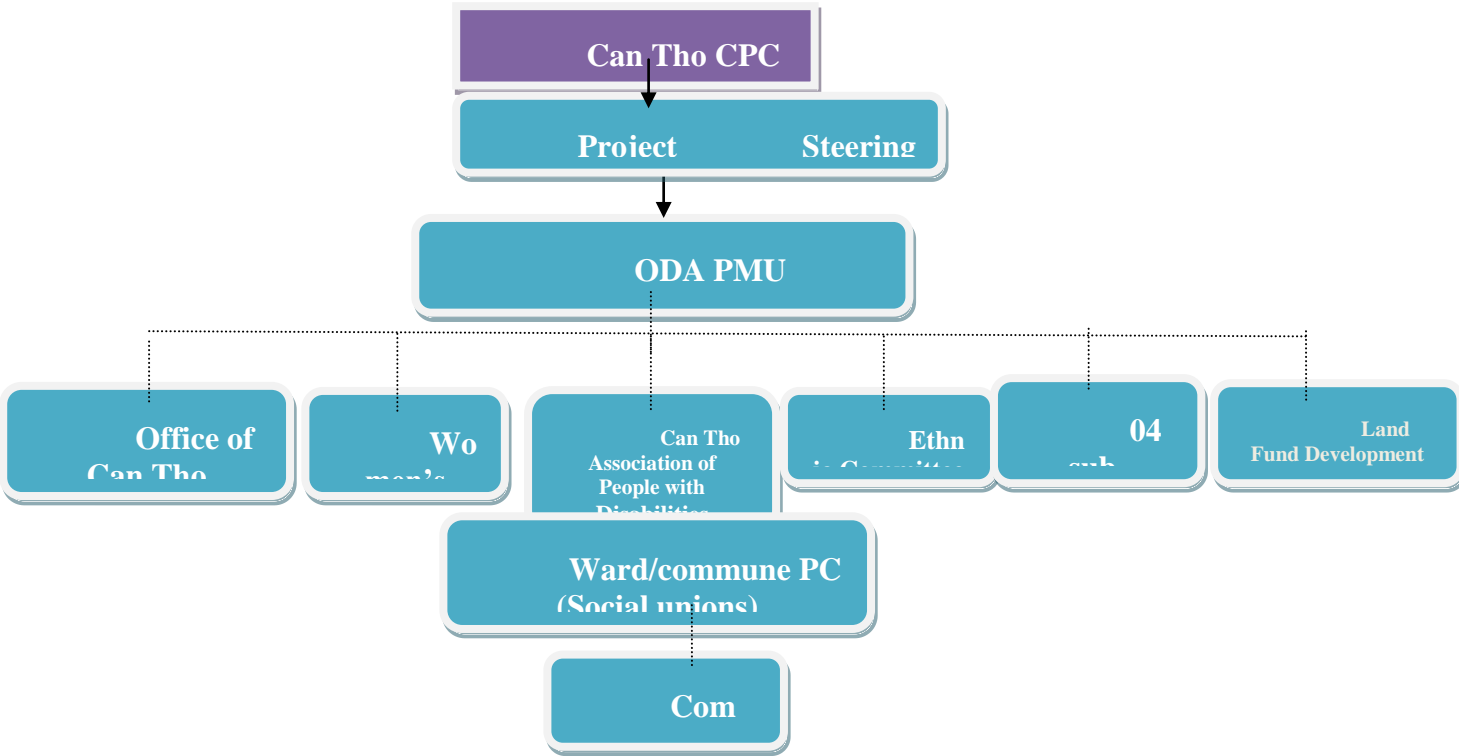
4. CHAPTER 4: STAKEHOLDERS CONSULTATION AND ENGAGEMENT

4.1. Stakeholders

4.1.1. Definition of stakeholders

During the preparation and implementation of the project, People’s Committee of Can Tho city acts as Executive Agency and take full responsibilities for monitoring and directing the project implementation under the supervision and direction of the relevant agencies. The Steering Committee of the CTUDR will, on behalf of the Executive Agency, manage all the project’s activities.

The implementing agencies include the relevant Departments, People’s Committees of districts/wards/communes/private sector and communities in the project area as well as consulting firms.



Besides secondary information source collected through the socio-economic survey for households, the Consultant worked with stakeholder such as the city Women’s Union, Climate Change Office, Ethnic Minority Division and Can Tho Association of People with Disabilities.

People’s Committee of Can Tho city acts as Executive Agency while the ODA-PMU of Can Tho city is directly under the City People’s Committee acts as Project Owner.

In addition, the City People’s Committee will establish the Steering Committee, of which Head of the Steering Committee is Deputy Chairman of the CPC and members are leaders of the relevant Departments and representative of the Climate Change Coordination Office.

The PMU with the support of the Steering Committee will be line agency among donors, Central Ministries – Departments, local authorities and contractors to create a close coordination during the project cycle.

After obtaining the approval and loans, the GoV will authorize the People's Committee of Can Tho city to manage the above-mentioned loan.

The CPC will appoint the ODA-PMU of Can Tho city to be Client of the project and allocate such loan for the Client to implement the Project.

Pursuant to Decision No. 53/QD- BCD dated 20 April 2015 of the Project Steering Committee on establishment of Project Steering Sub-Committees as follows:

- ***The Investment, Planning and Financial Sub-Committee***
- ***Work Items Preparation Sub-Committee.***
- ***Compensation, Assistance, Resettlement and Environmental Assessment Sub-Committee.***
- ***Capacity Building and Technical Assistance Sub-Committee.***

In addition, the city People's Committee established the Steering Board with the Chairman of Steering Committee as Vice chairman of CPC and members from Department - related sector of the city and a representative from office of Climate Change. The function of the Steering Board is to take responsibility for preparation of work plan and controls the loan disbursement and ensures the relationship with the agencies involved in provincial and central government. Project Steering Committee will be institutionalized fully competent for the project management unit, as well as the provincial departments and the departments of the cities involved in the project implementation. This authority will be determined after legally province issued a decision on the implementation of the loan agreements.

ODA PMU established under Decision 3966 / QD-Committee dated 12/29/2014 of People's Committee of Can Tho City on the basis of subject professional model project is the city committee tasked with the implementation of ODA projects in the city. Project Management Board with support from the Steering Committee will be the liaison between donors, ministries - Central Sector, local authorities and contractors to create a connected throughout the project implementation.

Can Tho city Women's union implement the tasks of propaganda, political education, ideological, revolutionary ideals, virtues, lifestyle; guidelines and policies of the Party, the policies and laws of the State; Advocating the elite women take the initiative and actively implement the guidelines and the Party's guidelines and policies, the State law, to participate in building the Party, the State, economic development - social and protection Country; advocacy, support women capacity building, education, building a happy family; care for the improvement of material life, the spirit of women;

Can Tho City Climate ChangeOffice was established under Decision No. 2746 / QD-Committee dated 06/12/2010 as specialized agencies support the Steering Committee Decision 158/2008 / QD-TTg December 2, 2008 by the Prime Minister on approving the National Target Programme to Respond to Climate Change.

Ethnic Committee of Can Tho City was established by Decision No. 48/2010 / QD-Committee dated 05.08.2010 of the MPC, the Committee for Ethnic Minorities specialized agencies across the Department of City People's Committee has the function of advising and assisting MPC performs the function of State management on ethnic affairs

Can Tho Association of People with Disabilities formerly known as Disability (PWD CLB) under DOLISA Tho established on 01.05.2001. After 6 years of operation efficiency and create opportunities for people with disabilities should be well integrated community of Can Tho City People's Committee signed Decision No. 2594 / QD 14/11/2007 Committee disabilities move from

club Tho City. The objective is to raise awareness of people with disabilities and their families on issues of disability; build the home for people with disabilities and encourage the Mekong Delta, promote, and create conditions for people with disabilities participate in the labor market in order to contribute to poverty reduction and improve the value PWD.

District Land Fund Development Centre: shall be responsible for making decisions on compensation and resettlement regimes and policies in the city, handing over of site for the construction contractor on progress. Coordinate with the PMU to carry out the resettlement and site clearance to ensure construction progress and social safeguard policies of the WB.

Ward/Commune People's Committees: Ward/Commune People's Committees will coordinate with the PMU to disclose information of the project to the local people, carry out the compensation, site clearance activities; Coordinate with the Construction Contractors, PMU, and Independent Monitoring Consultants during the monitoring of the Construction Contractors. Ward/Commune People's Committees will receive feedbacks from local people regarding their disadvantageous issues caused by the project. Ward/Commune People's Committees play important role in several activities both during the preparation and implementation phases.

4.1.2. Roles of Associations and Mass Organizations

The organizations, associations, mass organizations and beneficiaries from the Project play important roles during the implementation of the project.

Political – Social Organizations, like Fatherland Front, Women's Union, Farmers' Union, the Youth Union, the Elderly's Union with large force of membership and structure to each population group. The social organizations are in charge of closely monitoring the project implementation process, especially the period of land acquisition and resettlement compensation to ensure conformity with safeguard policies of the WB and the Vietnam's current regulations. The organizations, unions and mass organizations understand issues and feedbacks from people regarding activities of the project during the preparation, construction and putting the works into operation. The coordination among the organizations and population groups in the monitoring work plays an important role in supporting the PMU and Contractors promptly adjust the design, construction activities in order to minimize the undesirable impacts on the lives of the people in the affected area.

Population groups: Population groups are functioned to work directly with the local people and reflect issues raised during the preparation, construction and operation of project work items. Population groups will be final agencies to provide the project's information to local people and initial agencies to receive project-related feedbacks from local people. Population groups play an important role in reflecting objectively and timely expectations and suggestions of local people regarding the monitoring during the project implementation in order to minimize undesired impacts on their lives. In addition, feedbacks from the population groups also help to develop the project items more suitable and bring higher socio-economic efficiency to the community in directly beneficiary area of the project.

❖ Coordination among Stakeholders

During the project preparation and implementation, the participation of the stakeholders plays a special significance. Firstly, the participation during the designing of work items will contribute to adjusting design to meet technical requirements and increase socio-economic efficiency, minimize undesired impacts caused by the construction on the lives of local people, especially social and environmental issues during the construction and operation of the works. The ineffective coordination among stakeholders will cause the waste of resources and delay the project's progress, cause adverse social and environmental impacts. During the project implementation, the effective coordination among stakeholders will ensure progress of the project.

Through the analysis of two WB-funded projects under progress in the city (including VUUP 1 and VUUP 2) and the preparation phase of the CTUDR project, it can be realized that the coordination among stakeholders is quite good. Potential problems related to the stakeholder coordination that may occur during the implementation of the Project are level of participation of agencies in charge of management and operating the project items (roads, bridges and embankment, etc.) during the detailed design and construction/installation. Namely, participate in contributing opinions to design alternatives, construction supervision, building management model and calculating operation unit price.

One of the criteria for the success of the Project is to ensure that stakeholders will involve in all phases of the project. This objective requires to develop the Participation Plan. Roles and responsibilities for participation will be assigned for stakeholders as follows:

Table 4.3: Roles of stakeholders during the project preparation and implementation

<i>Stages</i> <i>Agencies</i>	<i>Preparation</i>	<i>Implementation</i>	<i>Management, operation and maintenance</i>
Community	Participate in the project preparation (discuss and agree with suitable technical options for the project works to be built at wards/communes)	Participate in monitoring through representative of community	Self-manage, operate and maintain the tertiary infrastructures and some social infrastructures; Contribute costs of operation and maintenance of other infrastructures
Ward/Commune authorities	Coordinate with the PMU in implementing tasks suitably with functions at request of the PMU	Participate in monitoring	Manage some tertiary infrastructure in wards
City Committee People's	Through sub-committees, coordinate and support the Client in implementing the Project; Approve FS report, Basic Design and total investment;	Through the Steering Committee to support the Client in implementing the Project; Approve the Bidding documents and results of selecting Bidder	
Ethnic Committee Woman union Can Tho Association of People with Disabilities Office of Climate Change	Co-ordinate with consulting agencies to screen potential impacts and propose solutions.	Based on estimated budget for action plans to assist implementation agencies to organize proposed activities;	Participate in community unions to manage, maintain project roads/ works
- Urban Management			Manage roads and embankments of

<div> <div>Stages</div> <div>Agencies</div> </div>	Preparation	Implementation	Management, operation and maintenance
Office			the project Manage bridges
- DONRE - DOC - DONRE - DOF - State Treasury of city	Preside over the appraisal Participate in appraising FS, Basic Design reports, total investment and cost estimate Appraise procedures for land acquisition Appraise the environmental impact assessment Appraise costs and unit prices Allocate fund according to investment phases		
Contractors, Consultants	Prepare construction survey report, FS, Basic design reports, construction engineering design and cost estimate	Participate in the construction supervision	

<div> <i>Stages</i> <i>Agencies</i> </div>	<i>Preparation</i>	<i>Implementation</i>	<i>Management, operation and maintenance</i>
<div> Construction Contractors </div>		<div> Carry out the construction </div>	

4.1.3. Project preparation and implementation support human resources

The People's Committee of Can Tho city established four sub-committees in charge of supporting the preparation and implementation of the Project.

Heads of these Sub-Committees will be Director/ Deputy Director of the relevant Departments while members of Sub-Committees are staff from the relevant Departments or the People's Committees of the project districts. The Sub-Committees are assigned tasks suitably with their typical characteristics. Head of the PMU will be Chairman of CPC and take responsibility for managing and directing the Sub-Committees to fulfill their tasks from the investment preparation to project implementation in accordance with the Loan Agreement, as well as coordinating with the relevant Ministries, Departments and Authorities in carrying out the preparation to ensure the progress and quality of the project works.

The ODA-PMU of Can Tho city is functioned to support the Client in preparing the project for submitting to the competent authorities for approval and implementing the project after approval, organize the acceptance, final settlement and handing over of the project to the management agencies in compliance with Investment Management and Construction Rules. The PMU consists of 6 functional divisions with over a half of staff who are experienced in project management, compensation, site clearance, design management, construction supervision from two WB-funded projects – VUUP 1 and VUUP 2. The PMU shall be responsible for managing the preparation of the project and continue undertaking the task of project management after the Implementation Agreement is signed.

4.1.4. Stakeholder Communication, consultation and participation strategies

Stakeholder communication, consultation strategies

Main objectives of the communication strategy is ensure the affected communities, households, local authorities, relevant agencies to be provided with information about the project, consulting about selection of technical options, potential impacts on land, income and non-land assets. Information disclosure plays an important role in promoting the progress of the project during the implementation, preparation and operation of the project with the consensus of communities, local authorities and relevant agencies. This will minimize possibility of conflicts and risks, increase investment efficiency and social significance of the project.

The overall objective of the Communication Strategy at local level is to ensure that the designs and implementation methods of the components are socio-economically affordable and appropriate

The specific objectives of the Communication Strategy are:

- To disseminate timely information on the subproject components specific to each city.
- To establish two-way information sharing/dialogue mechanisms with stakeholders.
- To raise public awareness on environmental protection through focusing upon
- Wastewater management, solid waste management and “greening industry”.
- To change behavior regarding gender equity.

However, during the implementation, there are still some risks and challenges of the Communication Strategy, including:

Regarding: Local authorities:

- Not enough attention paid to women, illiterate people and ethnic minorities.
- Information and consultation meetings often exclude the poor.

- Weak skills and capacity of local staff to conduct Communication Strategy activities.

Regarding: Community:

- Women often face heightened cultural barriers, and the traditional gender relationships and time constraints restrict their participation in consultations and decision-making
- Vulnerable groups like the poorest people, the disabled and some ethnic minorities, have no time or lack means to attend meetings or to access mass media.

Information-Awareness-Education (IAE) material: Lack of locally relevant IAE-material, and few materials in main ethnic minorities' languages

Mass media: Limited resources of provincial mass media (radio and TV) to produce specific local programs.

Main groups of stakeholders have been identified as being involved in the Communication Strategy:

- Local government, i.e. the PMU that will have the overall responsibility for the implementation of the Communication Strategy.
- Civil society (Women's Union, Youth's Union, and Veterans' Association): will be in charge of information dissemination and awareness raising campaigns.
- Beneficiaries from the subprojects and their outcomes, including indigenous people, poor and vulnerable groups.
- Local media that will develop and disseminate Information-Awareness-Education (IAE) materials.
- Private sector whose small and medium sized enterprises can benefit from business opportunities linked to infrastructure improvement.

The messages must appeal to the target stakeholders and be simple to facilitate understanding by people with low education levels. Messages will be tailored to the specificity of the local communities, i.e. with reference to gender, poverty and ethnicity aspects. The language used in communication activities should be Vietnamese or ethnic minority language (Khome etc.) based on a language understanding assessment of the target groups. The majority of the communities can understand Vietnamese proficiently. The materials will be pre-tested before their broader use.

The one-way information messages will focus on the key project benefits, project implementation phases and the impacts – both positive and negative – on the communities, and on the expected participation of the communities.

The mechanisms to ensure information sharing and dialogue with the communities will be developed through:

- Elaborating a consultation method in accordance with the traditional culture of the locality, and by taking the ADB gender, poverty and social safeguards measures into account.
- Designing consultation activities that maximize the participation of vulnerable peoples to ensure that local concerns are addressed during implementation.
- Providing a feedback mechanism to the affected communities ensuring their views are incorporated into project preparation and implementation.
- Identifying the channels of consultation that are preferred by the communities.

The Communication Strategy activities will be organized in cooperation with the Ward/Commune People's Committees. The responsibility for implementing the strategy will be shared between several stakeholders:

- The PMU will have the overall responsibility for updating and implementing the Communication Strategy and will be in charge of the activities targeted at the private sector.
- The Women's Union will support the dissemination of information and conduct awareness raising activities on environmental sanitation practices, including cooperation with schools to educate children, and on strengthening gender equality.
- The local media will produce IAE materials: print materials, newspapers, radio and TV programs, web, etc.

To fulfill the tasks, capacity building activities will be organized as follows:

- PMU officers in charge of Communication: Training in communication skills.
- Women's Union: Training in communication skills of community women members.
- Key Women's Union members: training in gender equity through applying a Training of Trainers approach (ToT).

These stakeholders will receive the support from the national and international Institutional Specialists as well as from the national and international Social and Gender Specialists.

Resources Required

The resources required for the implementation of the Communication Strategy refer to:

- The cost of the Communication Strategy activities that will be covered by the Capacity Building Program.
- The Consultancy cost for the National and International Institutional Specialists, and for the National and International Social and Gender Specialists.

Table 4.4: Stakeholder Communication and Consultation Strategy

Objective	Key Risks / Challenges	Main Stakeholders	Messages	Means of Communication (Channels /Languages /Activities)	Timeline	Responsibility	Resources (Human, \$)
1. To enhance project benefits and mitigate potential negative impacts, through timely information on the subproject components and potential social and economic benefits, particularly for the poor, women, and ethnic minorities.	Not enough attention paid to women, illiterate people and ethnic minorities. Poor excluded from information meetings. Limited/lack of locally relevant IAE-material and TV-radio programs.	PMU Women's Union. Subproject beneficiaries Local media Local private sector.	Schedule of implementation phases in different areas. Impacts – both positive and negative – on communities.	Messages tailored to the specificity of the local communities Print IAE materials: fact sheets, leaflets... Media outreach (radio, newspaper, TV, web, etc.) Commune loudspeaker system. Ward/commune meetings. Cultural events. Market days.	From outset of subproject and throughout subproject life in accordance with progress of activities. Outset of project: + Creation of IAE materials on subproject components + Training of stakeholders.	PMU Women's Union Local media	Funds through the Capacity Building Program. Consultancy cost for National and International Institutional Specialists, and for National and International Social and Gender Specialists.
2. To establish two-way information sharing/ dialogue mechanisms with stakeholders.	Traditional gender relationships and women's time constraints. Vulnerable groups' poor economic solutions.	PMU PIU Women's Union. Beneficiaries. Local private sector.	Role of stakeholders' consultation in subproject. Present feed-back mechanisms. Discussion on preferred channels of consultations.	Ward meetings. Group discussions. Communities Workshops. Local media. Use of participatory methods and tools.	From outset of project and throughout project life in accordance with progress of activities.	PMU Women's Union Local media	As above

Objective	Key Risks / Challenges	Main Stakeholders	Messages	Means of Communication (Channels /Languages /Activities)	Timeline	Responsibility	Resources (Human, \$)
3. To communicate wastewater connection benefits, tariffs and special provisions for poor and vulnerable households.	Identifying poor and vulnerable households for communication on special provisions	PMU PIU Women's Union. Beneficiaries.	Project's conditions for providing household connections. Monthly tariffs for wastewater connections.	Ward meetings. Group discussions. Communities Workshops. Local media. Use of participatory methods and tools.	From outset of project and throughout project life in accordance with progress of activities.	PMU PIU Women's Union	As above
4. To raise public awareness on environmental sanitation behavior and hygiene.	Limited/lack of locally relevant IAE-material and TV-radio programs.	PMU Women's Union. Local media. Beneficiaries. Private sector.	Key benefits of environmental sanitation: improved health, pleasant living environment Expected participation of the communities in community sanitation activities	Public meetings, fairs, exhibitions. Workshops, conferences. Group discussions. Separate meetings held for women. Print IAE materials. Radio and TV programs.	From outset of project and throughout project in accordance with progress of activities. Outset of project: + Creation of IAE materials on subproject components + Training of stakeholders	PMU. Women's Union. Local media.	As above
5. To communicate income livelihood	Limited/lack of relevant IAE-material in local (ethnic) language(s)	PMU PIU	Opportunities for women and men for employment in	Group discussions. Separate meetings held for women.	From outset of project and throughout project in accordance with	PMU	As above

Objective	Key Risks / Challenges	Main Stakeholders	Messages	Means of Communication (Channels /Languages /Activities)	Timeline	Responsibility	Resources (Human, \$)
restoration support measures.	Ethnic minority women difficult to reach	Women's Union. Enterprises' Association Department of Labor, Invalids and Social Affairs	project civil works		progress of activities.		
6. To communicate project's grievance redress mechanism and procedures.	Limited/lack of locally relevant IAE-material and TV-radio programs	PMU Project Implementation Unit	Who and where to contact Types of grievances Procedures: what information to provide, expected time for processing	Print IAE materials. Radio and TV programs.	From outset of project and throughout project in accordance with progress of activities.	PMU PIU	As above

4.2. Participation

In compliance with WB gender, poverty and social safeguard measures, consultations with local residents are designed to maximize their participation and to ensure that local concerns are addressed during each phase of the project. Particular attention is given to women who are disadvantaged by poverty, and ethnic and female prejudices. Community consultation and participation are done through information sharing, consultation meetings in the form of group discussions, and interactive decision-making.

Issues to be addressed by participation include:

- Assessment of current infrastructure problems in the cities (urban roads, existing drainage systems and embankments);
- General introduction of the project components with a focus on their potential social benefits, particularly for the poor, women, and ethnic minorities and vulnerable groups;
- Modalities of Indigenous Peoples' and women's participation in the construction, monitoring and post-construction maintenance phases of the activities (including introduction of grievance redress mechanism);
- Presentation of the chosen construction designs and activities implementation framework, including monitoring;
- Monitoring of the community engagement in project's implementation

Participation methods

Participation is ensured during each phase of the project through:

- Weekly and ad hoc meetings of local government staff in their respective departments.
- Inter-departmental meetings
- Visits to construction sites
- Information-sharing between stakeholders
- Timely information disclosure to communities, including women, disadvantaged and vulnerable groups
- Consultations meetings with civil society, beneficiaries and private sector
- Incorporation of affected communities' views into decision making
- Education and awareness raising campaigns
- Monitoring of subproject components
- Dissemination of elaborated monthly report between local government stakeholders

The data collection methods with the beneficiaries are qualitative through group discussions with key members of the communities, and gender segregated group discussions with poor indigenous people at the project sites.

Timeline for participatory activities

To maximize local communities' participation, consultations are organized at each milestone of the project.

During **the Assessment and Planning Stage**, consultations are useful for the identification of stakeholders' perception of problems and their interests to participate in their

coping. This knowledge is also useful to formulate information messages that make sense from the target audiences' point of view. The participation and awareness of local communities in identifying vulnerability and adaptation options also contribute to the community acceptance of subproject activities.

During the public consultations and focus group discussions carried out in June – August 2015 to provide qualitative information and elicit potential beneficiaries' views and concerns related to the various components of the project. As far as practically feasible the Public Consultations were carried out jointly by the various consulting team. The following consultations have been conducted as part of the consulting team.

During **the Implementation Stage**, a second round of communities' consultations is organized. These contribute to the participation of the local communities in the design of infrastructure improvements and plan for community engagement at the component locations. They aim to ensure that the choice of infrastructure options, and the planning, organization, implementation and maintenance of works at the sites are accepted by the population.

19 public consultations at the project wards were carried out during the preparation of the Social Assessment to further understand about needs of the community, suggestions and opinions of the local authorities and people in the project area to the works proposed to be built at the locality. Based on consultations with local authorities and residents in the area, the projects generally consult and propose mitigation measures for each issue, as follows.

Table 4.5: Syntheses of community concerns

o.	Community Concerns	Answers from the Project
1.	<p>People are panic and disbelief to the project if implemented slowly or on no schedule. They are concerned about the feasibility of the project, specifically</p> <p>For households subject to site clearance in phase 1 - Can Tho River Embankment. Currently the households have remaining part of land area, they intend to build a new house on the remaining land. However, so far Can Tho River Embankment Project is being implemented that makes them worried if the remaining area is acquired or not? This makes them insecure to live.</p>	<p>The project should follow the schedule.</p> <p>Any delays should be informed to the local authorities and the people on the causes.</p>
2.	<p>During construction of the adjacent canals, the land subsidence and erosion may occur, which will impact directly to households located in or near these areas.</p>	<p>Ensure to minimize the impacts on households and prepare contingency for compensation for affected households.</p>
3.	<p>Local residents will have land acquired to serve projects, some will be relocated and some will have to move out temporarily. This is upsetting the lives of families. People are fear of inadequate compensation, or the new shelter has not met their necessary infrastructure conditions, or fear that the expensive cost of purchasing resettlement background land lot so they do not want to hand over, or fear of the lives and livelihoods after resettlement.</p>	<p>Compensation at replacement costs</p> <p>Ensure adequate infrastructure such as power supply system, water supply, drainage system, etc. to meet the people's standards in Resettlement Sites.</p> <p>Landless Households will be provided a minimum plot in a serviced resettlement sites and arrangements will be taken to payback plots based on HH capacity to pay;.</p>

o.	Community Concerns	Answers from the Project
		<p>Technical infrastructure (electricity, water and internal roads) in resettlement should be prepared so that people can move to live.</p> <p>There should be the support schemes for farmers to stabilize their lives after serving land acquisition for the project, especially those living alone, elderly households, and groups of people over 40 years old. In parallel with this, there should be vocational training and job placement for those households that wish, which focuses on vocational training for those under 40 years old.</p>
4.	Remaining land area is fragmented and unusable	Acquisition of whole area for households who have too small remaining area to ensure urban aesthetics and avoid the formation of ultra-thin and super distortion houses.
5.	Using compensation for improper purposes raises social ills, poverty, debts.	Local governments should have orientation for money for families at risk of uncontrolled financial resources.
6.	Influence income for agribusinesses and traders, such as some business households in the mainstream market like Tan An, An Binh, An Lac, the temporary market, market toad in the alley. The market relocation does not only affect monthly income of households in the	The development of new markets in the region of Tan An to move households from the mainstream market area, temporary market, market toad to do business there should be completed

0.	Community Concerns	Answers from the Project
	small business market trade but also affects those small retail spontaneously outside the market area.	before the market area are cleared.
7.	<p>During the construction process the accident might happen if brick gravel cannot be properly prescribed or as the driver is careless and not paying attention. Especially accident may happen for the children when they are often curious to explore the performance of the units under construction. And in the rainy season the risk of accidents can increase compared to the other seasons. The digging of pits, building lake also easily cause unnecessary distress to the people and the children if they accidentally fall into a pit or a pond.</p>	<p>There should be specific notice of planned construction on the project sites for local people, in addition, the unit should ensure the installation of adequate warning signs at the site.</p> <p>Raise awareness about road safety during construction works for the local people. Despite some roads were built in the areas of project ward, but knowledge and practice safe driving behavior of people is still limited. The government and people living in the area of expected-to-run roads/bridges suggested that the project should attempt activities to raise awareness and practice of safe traffic behavior to the people so that they will not be passive and will know taking traffic safety.</p>
8.	<p>The presence of workers from other areas to the project site during the construction of the road may increase the risk of infiltration and infection diseases such as HIV and other infectious diseases.</p>	<p>Implementing intervention programs to raise awareness and training to prevent HIV / AIDS and infectious sexually diseases for local people, especially women.</p>
9.	<p>Environmental issues also need to be considered during the construction process such as the environmental pollution (ONMT),</p>	<p>The works performed will intersect with some existing lines and run through some residential</p>

o.	Community Concerns	Answers from the Project
	noise, smoke, dust.	<p>areas, so at some junctions with the main traffic routes there should be warning signs, installation of traffic lights or other safety equipment while earthworks, sewer construction, renovation or building embankments.</p> <p>Minimizing environmental pollution must be implemented strictly as the dumping and returning gravel and building materials to the construction should be ensured safety shield from dirt. The transport of dredged sediment should also be considered maintaining general hygiene to the people. Construction process, operating machinery should limit noise and should not be implemented in the noon, at night when people are resting</p> <p>There should be Environmental monitoring consultants.</p>
10	The social ills, social security and other conflicts can occur when workers from other places come here to work.	Raise communication in communities to fend for themselves and family members

5. CHAPTER 5:PROPOSED ACTION PLANS AND MITIGATION MEASURES

A number of action plans which include mitigation measures and measures to maximize benefits have been prepared under the social assessment.

5.1. Gender Action Plan and Gender Monitoring Plan

The survey results by questionnaire with households and community, job opportunities and adaptability to job change are barriers for women, especially farming women in age of above 40. The fact is that women mainly participate in hired laborers (*making nail, hairdressing and making-up.*) with low and unstable income. The project implementation will affect their livelihood due to accommodation relocation, thereby increasing risks of shortage of jobs for women. This impact may be minimized if local women, especially women of affected households are offered with opportunities to participate in the programs of vocational training, capacity building and propaganda campaign to raise awareness of sanitation, traffic safety or prevention of social evils. Job priority to women during the project implementation will reduce unemployment for women and create opportunities to increase income for affected households. During the project preparation, women are ensured to participate in community meetings, in-depth interviews as well as household survey at rate of 30-50%¹².

Income from hired labour of households in general and of women in general will be affected during the construction of the project works. Therefore, it is essential to arrange jobs suitable with local women, especially project-affected women. This will enable women to earn income from unskilled labor during the construction. However, job creation is both opportunity and also potential risk due to labor safety and abuse. Some other potential issues including traffic safety, discrimination for unskilled laborers should be considered. Gender issues is considered as a risk and incorporated in the Gender Action Plan and Gender Monitoring Plan, which is presented in the Annex 1.

5.2. Stakeholder Participation Plan

A Stakeholder Participation Plan was prepared and is presented in Annex 3. The Participation Plan thus serves as a framework to guide the participation of civil society and organizations that engages with civil social organizations/NGOs during project implementation. The dissemination of project information to stakeholders and affected communities and enabling dialogue of associated needs and preferences can help reduce potential opposition to a project, avoid conflicts that may occur during implementation, and minimize the risk of project delay. Mindful of the above objectives and principles, a Stakeholder Analysis was undertaken to inform the preparation of the Participation Plan by identifying key stakeholder groups, their interest with respect to proposed project interventions, and understanding of local perceptions of problems and issues which the project design proposes to address.

5.3 Social Action Plan

As part of the SA, a Social Action Plan (SAP) was prepared to ensure that social benefits are maximized and adverse impacts are mitigated, if not avoided. The SAP Framework is presented in the Table below.

¹²44.8 % female participated in questionnaire survey and ratios of depth –interviews and community consultation meetings accounts for 37.4% and 39.3% respectively

Table 5.1: Social Action plan Framework for the CTUDRP

Issues	Objectives/out come	Proposed Actions/ Mitigation measures	Agencies Involved	Indicators	Notes
Land Acquisition and Resettlement	<ul style="list-style-type: none"> - AH are compensated according to WB policy and will have their income restored; - Landless households will receive plot in serviced resettlement site 	<ul style="list-style-type: none"> - Prepare Resettlement Plans in accordance with WB Safeguard Policy. - As part of the RPs, income restoration programs (IRPs) will be prepared and funded under Detailed Design Consultant contract 	<ul style="list-style-type: none"> - PMU - Centre for Land Fund Development - Local authorities - Consultants 	<ul style="list-style-type: none"> - Resettlement Plans including IRP are prepared and uploaded on the WB's Vietnam Development Information Center (VDIC) in Hanoi. - Number of Landless HH with secure tenure (HH) - Number of HH who restored livelihoods (HH) 	<ul style="list-style-type: none"> - Estimated cost of the RP (including IRP) is 1,005,881,386,785 VND, equivalent to 44,646,311.00 USD - Budget under counterpart fund
Livelihoods Associated with relocation of Tan An market	<ul style="list-style-type: none"> - Shopkeepers are allocated plots in new market 	<ul style="list-style-type: none"> - New Tan An market will be built; - Shopkeepers will move once the new market will be completed 	<ul style="list-style-type: none"> - PMU - Centre for Land Fund Development - Local authorities - Consultants 	<ul style="list-style-type: none"> - Number of shopkeepers allocated with new plots in new Tan An market; 	<ul style="list-style-type: none"> - New market under CTURD budget;
Access and Mobility	<ul style="list-style-type: none"> - Improvement of road/bridge networks in the project area and reduction of travel time between NinhKieu and Cai Rang. - Increased walkability in key transport corridors; - Access are maintained during construction; 	<ul style="list-style-type: none"> - The detailed design will incorporate POD concepts such as bicycle lanes, sidewalks and green space. - Technical drawings include access to existing houses/shops during construction; 	<ul style="list-style-type: none"> - PMU - Department of Construction - Department of Transportation - Centre for Land Fund Development - Local authorities - Consultants 	<ul style="list-style-type: none"> - Reduction in travel time between NinhKieu and Cai Rang - Increased walkability in key transport corridors - Develop economic condition for project area 	<ul style="list-style-type: none"> - Cost included in the Detailed Design Consultant contract for detailed design

Issues	Objectives/out come	Proposed Actions/ Mitigation measures	Agencies Involved	Indicators	Notes
Resilience to flooding	<ul style="list-style-type: none"> - Flooding is reduced as a result of project intervention. - Land area from the 10-year return period flood risk is increasing in Can Tho in urban core - HH are more resilient with flood disaster 	<ul style="list-style-type: none"> - Embankments are rehabilitated along the River and Canals; - Social safety nets that are disaster responsive and are directly targeted at the poor are implemented. 	<ul style="list-style-type: none"> - PMU - Department of Construction - Department of Transportation - Centre for Land Fund Development - Local authorities - Consultants 	<ul style="list-style-type: none"> - Increase in urban core land area from the 10-year return period flood risk as a result of project intervention (Ha) - User Satisfaction with infrastructure service (reduced floods) developed through the project, disaggregated by Gender - Direct Project Beneficiaries protected from a 10-year return period flood event disaggregated by Gender and by bottom 40 % of population 	-
Risk of HIV/AIDS & Human Trafficking	<ul style="list-style-type: none"> - Minimize risks of exposure to HIV/AIDS and trafficking of women and children during construction and post construction phase due to large volumes of transit traffic along the proposed works. 	<ul style="list-style-type: none"> - A HIV/AIDS and Human Trafficking Awareness and Prevention Program will be prepared and implemented. - HIV/AIDS awareness and prevention measures to be included in the contractors' contracts. 	<ul style="list-style-type: none"> - PMU - Can Tho city, District and ward/communes Woman union - Preventive health Centre - Contractors - Local authorities - Consultants 	<ul style="list-style-type: none"> - HIV/AIDS and Human Trafficking Awareness and Prevention Programs will be prepared. - HIV/AIDS and Human Trafficking awareness and prevention measures included in the contractors' contracts 	- Implementation and monitoring of this activity will be carried out by the detailed design and implementation consultant;
Women	<ul style="list-style-type: none"> - Gender concerns are to be main-streamed in all project components, as part of the RPs, HIV/AIDS and Human 	<ul style="list-style-type: none"> - Gender Action Plan to be Prepared 	<ul style="list-style-type: none"> - PMU - Can Tho city, District and ward/communes Woman union 	<ul style="list-style-type: none"> - A gender strategy is prepared for the activities stated above. 	- See Annex 1 for the full Gender Action Plan

Issues	Objectives/out come	Proposed Actions/ Mitigation measures	Agencies Involved	Indicators	Notes
	<p>Trafficking Awareness and Prevention Program, Income Restoration Strategy, Road Safety, Labor issues, & Communication Plan.</p> <p>- Maximize Employment of Women during Construction</p>		<p>- Local authorities</p> <p>- Consultants</p>		
Labour	<p>- Contractors' contracts to include conditions to ensure occupational health and safety; do not differentiate payment between women and men, and those who belong to local ethnic Khmer groups, for work of equal value; prevent use of child labor; and comply with the government's labor laws and related international treaty obligations ;</p> <p>- Maximize Employment of Women and poor HH during Construction</p>	<p>- Contractor's contract have been reviewed to ensure that clauses related to OH&S and gender equity issued are included</p> <p>- Priority for women and poor HH for unskilled labour;</p>	<p>- PMU</p> <p>- Social unions (Youth union, woman union...)</p> <p>- District Centre for Employment Introduction</p> <p>- Local authorities</p> <p>- Contractors</p> <p>- Consultants</p>	<p>- Clauses related to: i) Occupational Health & Safety; ii) promotion of gender equity and prevention of gender-based discrimination; and iii) prevention of use of child labor have been included in contractors' contracts.</p> <p>- Number of local workers employed by gender</p> <p>- Male and female unskilled workers will receive equal pay for equal work;</p> <p>-</p>	-

Issues	Objectives/out come	Proposed Actions/ Mitigation measures	Agencies Involved	Indicators	Notes
Ethnic Groups	- Poor ethnic households, will be assisted	- Ethnic groups are assisted under the provisions of the Resettlement Plan; -	- PMU - Ethnic Affair Board - Local authorities - Consultants	- Number of ethnic household assisted	- Costs included in the RP

6. CHAPTER 6: INFORMATION UPDATING, MONITORING AND EVALUATION

6.1. Objectives of monitoring and assessment

Purposes of monitoring and evaluation are (i) to consider whether the project's activities are completed effectively or not, in terms of quantity, quality and timeline; (ii) to evaluate whether these activities meet objectives and purposes of the project and level of achievement.

To ensure efficiency of the project, it is required to prepare the monitoring plan with the participation of the relevant agencies such as DONRE, DOC, DPI, DOT. The agencies in charge of directly managing and operating the project items should be involved in monitoring during the design and construction of the works.

Together with the independent monitoring team of the project, it also requires a community-level monitoring team to monitor the project's activities, especially activities related to resettlement, environmental sanitation and construction of work items. The monitoring team consists of representatives of local authorities, unions such as Women's Union, Fatherland Front, Veterans' Union, Farmers' Union and representatives of local people. The community-level monitoring team will coordinate with the independent monitoring team and base on social safeguard indicators to monitor the project's activities. Indicators of life restoration, production, environmental sanitation, transport, drainage will be established to serve the project's monitoring plan. Through the reality monitoring, the community-level monitoring team can reflect timely information about progress of the project and issues arised during the project implementation to inform the PMU for promptly addressing. The community-level monitoring team shall be responsible for collecting feedbacks of local people for submitting to the competent authorities and PMU. Simultaneously, local people also participate in the construction supervision, ensuring labor safety and environmental sanitation during the construction.

The community-level monitoring team should be provided with a traning plan for strengthen capacity of monitoring and evaluation for the project's activities. Monitoring skills will be trained and considered as a part of the participatory monitoring plan of the project.

It is noted to apply the Resolution No. 80/CP on community monitoring for the local construction works.

6.2. Targets and indicators

Indicator for project impacts: Can Tho city will have increased economic activities, social benefits and a fresher environment. As indicated in Table 4.1, the following indicators will be measured;

Indicators

- Landless HH with secure tenure (HH)
- Number of HH who restored livelihoods (HH)
- Number of poor ethnic household assisted
- Number of shopkeepers from Tan An market allocated with new plots in new Tan An market(nb);
- Reduction in travel time between NinhKieu and Cai Rang
- Increased walkability in key transport corridors
- Reduction of flooding incidence;

- Develop economic condition for project area
- Increase in urban core land area from the 10-year return period flood risk as a result of project intervention (Ha)
- User Satisfaction with infrastructure service (reduced floods) developed through the project, disaggregated by Gender
- Direct Project Beneficiaries protected from a 10-year return period flood event disaggregated by Gender and by bottom 40 % of population

Data source

- PMU/Consultant internal monitoring reports;
- IMA monitoring reports;
- Socio-economic development reports and statistics of the districts, wards/communes of the project.
- Reports and Statistics of Can Tho city
- Supplementary survey (e.g. urban development completion and traffic studies)

6.3. Monitoring responsibilities

Can Tho People's Committee

Establish and operate the project monitoring and evaluation system at level of executing agency, inspect the project at least once a year and arrange required human resources for the monitoring and evaluation.

Implement the reporting regime in accordance with the current regulations and guidelines of the MPI.

Timely and fully reflect suggestions of the Project Owner in the project progress and assessment result reports, coordinate with the Donor and relevant agencies to carry out ad-hoc evaluation if necessary.

Organize to evaluate project impacts under its authority according to the annual impact assessment plan of the MPI.

Share information through the monitoring and evaluation system of the project at level of executing agency to ensure the transparency and participation of community.

Project Management Unit

Establish the internal information system, collect and store fully information, data, dossiers, books and documents of the project, reports of the contractors, changes in Vietnam's policies and laws and Donor's regulations on project management.

Prepare reports, provide and share information through the monitoring and evaluation system at department, local and national level.

Support the Project Owner in the monitoring and evaluation of the Project.

To monitor the progress of the Project in achieving outcome and output, the PMU will establish and maintain a management system of project's activities with the required flexibility for correcting consequences in designing, plan, activities and impacts of the Project. The management system will use following indicators: (i) implementation progress of subprojects; (ii) outcome of the capacity building program; (iii) household connection with drainage and supply systems; (iv) reduced flooding risks; (v) social development and poverty.

In the early phase of the Project, the PMU will consult the City People's Committee to develop a completed project management process in order to provide information about outputs and inputs of the Project, socio-economic situation and environmental indicators for environmental impact assessment in systematic manner.

The PMU will complete the project management framework to determine whether objectives can be achieved or not, consolidate the monitoring organization, recognize and establish systems and procedures at least 6 months after implementing the Project. Baseline and progress of the Project will be reported by the functional agencies to the PMU at required period, including the annual water resource reports and environmental management plan. The PMU shall be responsible for analyzing and summarizing report data through the information management systems and reporting achievements to WB in the quarterly progress reports.

Stakeholders

The Government of Vietnam, through the Prime Minister, shall manage all Ministries and Government agencies with the following functions and tasks:

The MPI is a line agency that supports the Prime Minister to collect opinions of the relevant Ministries, Departments and local authorities, then submit to the Prime Minister for approving the Project detailed outline, investment plan and annual disbursement plan.

The Ministry of Finance shall be responsible for issuing guidelines for the project financial mechanism before the Loan Agreement is signed. The Ministry shall inspect, consider and agree in written to allow withdrawing funds from donors for covering costs of project implementation at the request of the Client. The MOF shall preside over, follow-up and approve the final settlement of investment fund for balancing investment after the project is completed.

State Bank of Vietnam shall be on behalf of the Government negotiate and sign the Loan Agreement and WB's legal documents.

The Ministry of Construction with functions and tasks in sector management shall consider technical issues of the project components and directly support the city with non-structural measures. The MOC shall be responsible for appraising Basic Design and some other verifications of the project.

The Ministry of Agriculture and Rural Development, the Ministry of Transport and other relevant ministries, departments with the functions and tasks in sector management to consider technical issues of all project components and directly support the city with non-structural measures.

The Ministry of Natural Resources and Environment shall consider environmental issues.

7. CHAPTER 7: CONCLUSION

The Project will generate positive environmental, social and economic impacts during the operational phase. This includes: improved public health and living conditions in the project area; reduction of flooding for households and commercial areas along the two sides of the Can Tho; and increased efficiency of production and consumption of goods due to better market accessibilities.

The main negative social impacts related to the project include: i) involuntary resettlement; ii) loss of livelihoods; iii) impacts on vulnerable groups; iv) impacts on safety and health.

These impacts will be mitigated through a number of plans and programs prepared for the Project:

- Resettlement Plan;
- Income Restoration Program;
- Environmental and Social Management Plan
- Social Action Plan
- Gender Action Plan.
- Stakeholder Participation Plan

These plans also include measures to maximize benefits for the community.

The PMU will be in charge of the implementation of these plans and programs and will provide a strong organization to manage the social safeguards component of the Project.

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CHAPTER 8. ANNEXES

Annex 1: Gender Action and Monitoring Plan

Annex 2: Stakeholder Participation Plan

Annex 3: Some picture at site

Annex 1: Gender Action and Monitoring Plan

A. Overall Objective and Strategy

The objective of the GAP is to promote women's participation in the project and share in the benefits, maximize positive gender equality impacts as well mitigate possible risks and negative impacts. The GAP has a three pronged approach: *(1) provide opportunities for and strengthen the role of women in local economic activities; (2) disseminate information about urban environmental sustainability and social risks to men and women; and (3) increase female representation in the sector and in decision making positions.* These strategies seek to address limited availability of sustainable livelihoods and gender equality in livelihood opportunities, unequal impact from the poor environmental sanitation due to female higher exposure and gender defined responsibilities, risk of human trafficking and low female representation in government institutions and decision making processes. The GAP includes gender sensitive design elements in urban infrastructure provision; targets for female staff in PMU with training in key management areas; gender sensitization training for all community leaders, government officers, and consultants involved in project implementation and delivery; promotion and monitoring of women's employment in all available project positions; and community information campaigns to enhance awareness of benefits from environmental sanitation improvements and dissemination of social risks of human trafficking. The GAP will be complemented by targeted skills development, supported by market and value chain studies, provided through the Capacity Development Plan to enhance local capture of employment opportunities resulting from project investments. Collection and monitoring of sex-disaggregated data with gender sensitive indicators will be established in the Project's Performance Monitoring and Information System (PPMIS).

B. Budget and Implementation Arrangements

The GAP budget is part of an integrated budget allocation for the implementation of social development initiatives financed by the Government of Viet Nam, as part of their counterpart funding commitment, under consultancy services and the incremental administration cost. The city People's Committee will act as the EA, which will work with the towns PMU/PIU to implement and monitor the GAP with support from the national social development and gender specialist and local gender focal. International and national community development specialists will assist through the Capacity Building Program, financed from government counterpart funds. The PMU will incorporate GAP monitoring in their quarterly progress reports, (using the WB's GAP Progress Report template) to Government and WB.

Table A. 1: Gender Action Plan

Action s	Indicators and Targets		R esponsibl e
Outcome Improved flooding situation and environmental sanitation in Can Tho city			
Adequ ate resources are allocated to ensure GAP is implemented	307,000 women in 4 districts of Can Tho city will benefit from the works under Component 1&2.		
Output 1. Implementing project items			
Streng thened flood management and improved water source	In 7 project districts in particular and Can Tho city in general, flood risk is reduced when building work items under Component 1 with anti-tide culverts/docks, dredging canals and building 2 retention lakes in BinhThuy district	Pr oject Coordinat ion Committe e, PMU	
Output 2. Institutional capacities for managing public investments strengthened			
Target s for female representation in sector/decisio n making/traini ng	At least 10 persons (30% female) trained in key project management areas. At least 30 persons (50% female) provided gender sensitization training for community leaders, government officers, and consultants involved in project implementation and delivery. PMUs shall target recruitment of 30% female staff, including 10% in decision making positions.	PMU	
Nation al Social Development and Gender Specialist. designated by PMU	The National Social Development and Gender Specialist will be part of the PISC team to assist the PMU. They will provide technical leadership in preparation of community awareness campaigns, GAP implementation and monitoring; assist the PMU in programs and projects to develop livelihoods, social development and vocational needs, targeted at participation of poor self-identified unskilled laborers (75% female) in sub project towns for formal skills upgrading and vocational training related to corridor town competitive	PMU	

Action s	Indicators and Targets	R esponsibl e
	advantage (e.g. hospitality/foreign language/tourism services, formal construction skills).	
Employment creation	15% of unskilled laborers employed in construction are women. 10% of staffs employed in O&M are women	PMU
Gender monitoring	PPMIS will include sex-disaggregated data and gender-sensitive monitoring indicators and the PMU will provide quarterly GAP progress reports to the Government and WB using the WB's GAP progress report template.	PMU
Output 3. Community awareness on project activities, environmental sustainability improved		
At least 15 community awareness and dissemination campaigns	At least 5 campaigns in each town over the project implementation period, covering environmental sanitation/social risk themes supporting increased access to services with equal men and women attendance.	PMU, Women's Union

Annex 2: Stakeholder Participation Plan

A. Participation Plan

Consultation and participation of project affected communities and civil society stakeholders are done right through from the project concept, design, and preparation and implementation stages. During the project design phase, the exercise involves fully sharing information on the Project with the targeted beneficiary households and communities and affected people. Its purpose is to engage stakeholders on the potential impact and effectiveness of the Project to enhance positive benefits for them as well as mitigate any negative impacts. It also serves to provide them with information about projects and programs including potential impacts, safeguard plans, mitigation measures, and institutional arrangements.

The Participation Plan thus serves as a framework to guide the participation of civil society and organizations that engages with civil social organizations/NGOs during project implementation. The dissemination of project information to stakeholders and affected communities and enabling dialogue of associated needs and preferences can help reduce potential opposition to a project, avoid conflicts that may occur during implementation, and minimize the risk of project delay. Mindful of the above objectives and principles, a Stakeholder Analysis was undertaken to inform the preparation of the Participation Plan by identifying key stakeholder groups, their interest with respect to proposed project interventions, and understanding of local perceptions of problems and issues which the project design proposes to address.

The Participation Plan presented in Table 10.4 below, identifies who are the key stakeholders assisting civil society and representing the target beneficiaries and affected people under the project. It outlines the reasons for their involvement in the project; what mechanisms for participation are to be used to meaningfully engage them; the parties responsible for facilitating the consultation and participation; timing and indicative costs. The Participation Plan together with the Stakeholder Communication Strategy (SCS) are important guiding documents for implementing the project since a significant portion of the total population (600,516 people) in 4 districts of Can Tho city are expected to benefit from Components 1&2 of the Project. Their participation is crucial to the Project's effectiveness and success.

Table A1.1.Participation Plan

Stakeholder Group	Objective of their Intervention	Approach to Participation and Depth	Participations methods		Cost Estimate
Local Government	Why Included		Method	Who responsible	
Department of Natural Resources and Environment (DoNRE). Department of Agriculture and Rural Development, Department of Transport, Bureau of Irrigation , Water Supply and Drainage Co., Ltd; District Urban Management Office.	Provide guidance and coordinate the committee responsible for the environmental appraisal of the project	Collaboration (high)	<ul style="list-style-type: none"> • Participate in packages of Capacity Building and Strengthening Program • Elaborate guidelines relevant for the environmental issues of the subproject • Monitoring through visit to subproject sites • Monthly and ad hoc meetings with other local government agencies and with local decision makers representing people's interests • Disclose monthly report to stakeholders 	DoNRE	

Stakeholder Group	Objective of their Intervention	Approach to Participation and Depth	Participations methods		Cost Estimate
City Ethnic Affair Board	Ensure that ethnic minorities benefit from the project	Collaboration (high)	<ul style="list-style-type: none"> • Participate in packages of Capacity Building and Strengthening Program • Monthly and ad hoc meetings with government agencies implementing the subproject to gather information • Organize Information Generation & Sharing meetings with ethnic minorities at milestones of subprojects • Organize Consultation meetings with ethnic minorities at milestones of subprojects • Collaborate with DOLISA and provincial Women's Union • Monthly report disseminated to relevant stakeholders 	PMU	
- DOLISA,	Ensure that women, poor and	Collaboration (high)	<ul style="list-style-type: none"> • Participate in packages of Capacity Building and Strengthening 	DOLISA	

Stakeholder Group	Objective of their Intervention	Approach to Participation and Depth	Participations methods		Cost Estimate
	vulnerable people benefit from the project		Program <ul style="list-style-type: none"> • Monthly and ad hoc meetings with government agencies implementing the project to gather information • Organize Consultation meetings with women, ethnic minority people at milestones of project • Collaborate with city Women's Union • Monthly report disseminated to relevant stakeholders 		
Women's Union (WU)	Expertise in Empowerment of Women Large outreach and presence in communities	Collaboration (high)	<ul style="list-style-type: none"> • Participate in packages of Capacity Building and Strengthening Program • Organize Information Generation & Sharing meetings with women at milestones of the project • Organize Consultation meetings with women at milestones of the project 	Women's Union	Costs included in Capacity Development budget

Stakeholder Group	Objective of their Intervention	Approach to Participation and Depth	Participations methods		Cost Estimate
			<ul style="list-style-type: none"> • Organize awareness raising and communication campaigns on issues related to implementation and O&M • Organize training sessions on issues related to implementation and O&M of the project • Monthly report disseminated to relevant stakeholders 		
All poor households with special focus on affected poor and vulnerable households and communities	Design and implementation of the components are adjusted to the local situation, and receive support of the beneficiary communities.	Collaboration (Medium)	<ul style="list-style-type: none"> • Participation in Information Generation & Sharing meetings at milestones of components • Participation in Consultation meetings at milestones of components • Participation in awareness raising and communication campaigns on issues related to implementation and O&M of components • Participation in consultations that 		

Stakeholder Group	Objective of their Intervention	Approach to Participation and Depth	Participations methods		Cost Estimate
			<p>focus on the identification of the forms of message dissemination that are preferred by the communities</p> <ul style="list-style-type: none"> • Participate in vocational training activities, O&M and employment opportunities generated by the project 		

B. Stakeholder Communication Strategy (SCS)

The preparation and adoption of a stakeholder communication strategy is to ensure inclusiveness, transparency, timeliness and the meaningful participation of stakeholders in the project. The SCS promotes select messages targeted at key stakeholders consistent with established communication objectives as to what perspectives; actions and changes should be promoted to ensure the project's success.

Key stakeholders, who are essential to engage to achieve project objectives and lessen project specific risks and challenges, have been identified. Stakeholders include (i) government agencies responsible for the design, management, and implementation of the project (CPC, PMU, DPI, Ethnic Affair Board, WU); (ii) Department of Transport, Department of Agriculture and Rural Development, DONRE, Can Tho Water Supply and Drainage Co., Ltd., Bureau of Irrigation and District urban management office; (iii) residents in wards and communes; and (iv) local media. The strategy serves to inform and support community development, enhance government agency capacity to manage project outcome, and enhance project benefits and mitigate negative impacts

Objectives of SCS

- To enhance project benefits and mitigate potential negative impacts, through timely information on the subproject components and potential social and economic benefits, particularly for the poor, women, and ethnic minorities;
- To establish two-way information sharing/dialogue mechanisms with stakeholders;
- To communicate wastewater connection benefits, tariffs and special provisions for poor and vulnerable households;
- To raise public awareness on environmental sanitation behavior and hygiene.
- To communicate IR livelihood support measures;
- To communicate project's grievance redress mechanism and procedures;
- To promote gender equity generally and with a particular focus upon women empowerment, women's access to economic opportunities;

C. Responsibilities and Resources

- The SCS activities will be organized in cooperation with Women's Union and the Commune/Ward People's Committees. The responsibility for implementing the strategy will be shared between several stakeholders.
- The PMU will have the overall responsibility for updating and implementing the SCS and will be in charge of the activities targeted at the private sector.
- The Women's Union will assist in the dissemination of information and conduct awareness-raising activities on the subjects listed in the GAP, possibly engaging relevant NGOs/CSOs.
- The local media will produce IAE materials: print materials, newspapers, radio and TV programs, web, etc.

To fulfil the tasks, capacity building activities will be organized as follows:

- PMU officers in charge of Communication: Training in communication skills.

- Key Women's Union staff: training on personal value and self-esteem and subsequent training of WU members, applying a Training of Trainers approach (ToT).

These stakeholders will receive the support from the national and international Institutional Specialists as well as from the national and international Social and Gender Specialists.

Resources Required

The resources required for the implementation of the SCS refers to:

- The cost of the Communication Strategy activities that will be covered by the Capacity Building Program.
- The Consultancy cost for the National and International Institutional Specialists, and for the National and International Social and Gender Specialists.

Annex 3: Picture at site



Ba Bo canal, from Hang Bang to Nguyen Van Linh, near Sao BinhThuy canal



Hang Bang canal at Cai Son Hang Bang section



Tu Ho canal, near Ngong canal



Ong Ta canal, near Bun



*XeoNhum canal, near bridge
No. 3*

*Ngong canal, near bridge
Ngong II*

Souvenir Stores at Lot E12-E13 Nha Co, NinhKieu Quay, Can Tho City

The Stall introduces and supplies products made by the disabled, however due to limited promotion of products, the trade are not effective. Besides, the existing tax base is paid monthly for market PMU with amount of 4 million dong per month, is also a great pressure NhipCau premise.

