

添付資料

- (1) フンイエン・労働者向け市街地の開発フレームワーク

フインエン・労働者向け市街地の開発フレームワーク

表1. 労働者および居住者の人口予測(ロテコおよびアマタ工業団地労働者)

項目	単位	人数	計算式	備考
[1] 労働者人口	人	39,400		第一タンロン工業団地の労働者数を基に予測
[2] 流入労働者(新規に住宅を必要としている労働者)人口	人	23,640	[1] x 60%	越国他工業団地における計画値を参考
[3] 単身労働者人口	人	16,548	[2] x 70%	アンケート調査による割合
[4] 帯家族労働者人口	人	7,092	[2] x 30%	アンケート調査による割合
[5] 帯家族労働者本人を除いた家族人口	人	21,276	[4] x 3	平均1世帯4人と仮定
総人口	人	44,916	[3]+[4]+[5]	

表2. 都市インフラの需要予測

部門	項目	人口	原単位	coef.	数量	適応法律・規定	備考
上水道	一般(家庭)	44,916	80 lpcd	1	3,593 m ³ /d	QCXDVN 01:2008, Table 5.2	最低値
	社会インフラ	44,916	80 lpcd	0.1	359 m ³ /d	QCXDVN 01:2008, Item 5.3.1-2)	一般(家庭) 給水量の10%
	その他(都市インフラ維持管理)	44,916	80 lpcd	0.08	287 m ³ /d	QCXDVN 01:2008, Item 5.3.1-2)	一般(家庭) 給水量の8%
	Total				4,240 m³/d		
下水道	一般(家庭)	44,916	80 lpcd	0.8	2,875 m³/d	QCXDVN 01:2008, Item 6.1.1-4)	一般(家庭) 給水量の最低80%
	一般(家庭)	44,916	300 W/pop	1	13 MVA	QCXDVN 01:2008, Table 7.1	
電力	社会インフラ	44,916	300 W/pop	0.35	5 MVA	QCXDVN 01:2008, Table 7.2	一般(家庭) 給水量の35%
	その他(都市インフラ維持管理)	44,916	300 W/pop	0.1	1 MVA	規定なし	一般(家庭) 給水量の10%
	Total				20 MVA		
廃棄物 (ゴミ)	一般(家庭)	44,916	1 kg/pop/day	1	40 ton/day	QCXDVN 01:2008, Table 6.2	

表3. 必要住宅面積の算出

分類	項目	人口	原単位	面積など	適応法律・規定
单身寮	部屋数	16,548	4 pop/room	4,137 room	4人相部屋; 現状の民間賃貸に準じる
	一人当りの占有面積	16,548	7 m2/pop	115,836 m2	VN-MOCの標準設計Type A1.3に準じる
	一人当りの共有面積	16,548	2 m2/pop	28,959 m2	占有面積の25%
	一人当りの公共設備面積	16,548	2 m2/pop	28,959 m2	1/6階を公共設備・施設として活用
住宅(单身寮)面積小計				173,754 m2	
家族用住宅	部屋数	28,368	4 pop/room	7,092 room	4人1家族と想定
	一人当りの占有面積	28,368	10 m2/pop	283,680 m2	VN-MOCの標準設計Type B1.1に準じる
	一人当りの共有面積	28,368	3 m2/pop	70,920 m2	占有面積の25%
	一人当りの公共設備面積	28,368	3 m2/pop	70,920 m2	1/6階を公共設備・施設として活用
住宅(家族用住宅)面積小計				425,520 m2	
総住宅面積				599,274 m2	

表4. 住宅施設の建築面積

項目	床面積 (m2)	階数	建築面積 (m2)	適応法律・規定
单身寮	建築面積	6	28,959	max. 6th floor w/o elevator, incl. 1 utility floor
	敷地面積 (m2)	建築率		適応法律・規定
家族用住宅	敷地面積	50%	57,918	Max75%; QCXDVN 01:2008, Table 2.7a
	建築面積	階数	建築面積 (m2)	適応法律・規定
		6	70,920	max. 6th floor w/o elevator, incl. 1 utility floor
		建築率	敷地面積 (m2)	適応法律・規定
住宅施設面積			141,840	Max75%; QCXDVN 01:2008, Table 2.7a
			199,758 m2	

表 5. 社会インフラ施設(教育施設)に必要な面積

対象単位	収容人数	必要施設数	基準	備考
1,418 seat	250 seat	6 unit	QCXDVN 01:2008, Table 2.1	児童数50席/1,000人; 8m2/席 最大10クラス, 25人/クラス= 250席/園, 2,000m2/園 (建築, 40%, 公園 60% = 30% 運動場 + 30% 児童公園)
一人当たりの面	1施設当たりの面	全体面積	Decision14/2008/QD-BGDDT	
8 m2	2,000 m2	児童公園		
建築	運動場	児童公園		
4,800 m2	3,600 m2	3,600 m2		
対象単位	収容人数	必要施設数	基準	備考
1,844 seat	700 seat	3 unit	QCXDVN 01:2008, Table 2.1	児童数65席/1,000人; 6m2/席 最大4クラス/学年x5=20クラス, 最大35席/クラス= 700席/学校, 4200m2/学校 (建築,30%, 施設 15%, 運動場 40%, 児童公園 15%)
一人当たりの面	1施設当たりの面	全体面積	Decision51/2007/QD-BGDDT	
6 m2	4,200 m2	12,600 m2		
建築	運動場	児童公園		
5,670 m2	5,040 m2	1,890 m2		
対象単位	収容人数	必要施設数	基準	備考
1,560 seat	720 seat	2 unit	QCXDVN 01:2008, Table 2.1	55 席/1,000 人; 6m2/席 最大4クラス/学年x4= 16クラス, 最大45席/クラス= 720席/学校, 4320m2/学校 (建築,30%, 施設 15%, 運動場 40%, 児童公園 15%)
一人当たりの面	1施設当たりの面	全体面積	Decision07/2007/QD-BGDDT	
6 m2	4,320 m2	8,640 m2		
建築	運動場	児童公園		
3,888 m2	3,456 m2	1,296 m2		
対象単位	収容人数	必要施設数	基準	備考
1,135 seat	1,215 seat	1 unit	QCXDVN 01:2008, Table 2.1	40 席/1,000人; 6m2/席 最大9クラス/学年= 27クラス, 最大45席/クラス= 1215席/学校, 7290m2/学校 (建築,30%, 施設 15%, 運動場40%, 児童公園 15%)
一人当たりの面	1施設当たりの面	全体面積	Decision07/2007/QD-BGDDT	
6 m2	7,290 m2	7,290 m2		
建築	運動場	児童公園		
3,281 m2	2,916 m2	1,094 m2		
社会インフラ施設(教育施設)の面積				
40,530 m2				

表 6. 社会インフラ施設(教育施設以外)に必要な面積

項目	対象単位	原単位(m2)	面積など	適応法律・規定	備考
医療施設	45 unit	500 m2	22,500 m2	QCXDVN 01:2008, Table 2.1	1 ユニット(500m2)/1,000人 居住地域において半径 5km 円内1箇所(標準) 居住地域において半径 1km 円内1箇所 居住地域において半径 1km 円内1箇所
消防施設	1 unit	3,000 m2	3,000 m2	QCXDVN 01:2008, Item 2.7.4	
警察	-	-	-		
郵便局	-	-	-		
商業施設	3 unit	8,000 m2	24,000 m2	QCXDVN 01:2008, Table 2.1	1 箇所 (8,000m2) / 居住地域(最大, 20,000人) 1 箇所 (5,000m2) / 居住地域(最大, 20,000人)
地域公園	3 unit	5,000 m2	15,000 m2	QCXDVN 01: 2008, Item 2.6.3	
社会インフラ施設(教育施設以外)の面積					
64,500 m2					

表 7. 都市インフラ施設に必要な面積

項目	割合	面積など	適応法律・規定	備考
全体開発面積				
304,788 m2	20%	60,958 m2	適用なし	道路計画に従って道路面積が決まる。
道路および歩道				

表 8. 土地利用計画 (1期)

区分	面積 (ha)	
	1期 (ha)	(%)
單身寮	5.79	(15.8%)
家族用住宅	14.18	(38.8%)
幼稚園	0.84	(2.3%)
小学校	1.07	(2.9%)
中学校	0.73	(2.0%)
高校	0.62	(1.7%)
児童公園	0.79	(2.2%)
医療施設	2.25	(6.2%)
消防署	0.30	(0.8%)
商業施設	2.40	(6.6%)
地域公園	1.50	(4.1%)
道路	6.10	(16.7%)
全体	36.57	(100.0%)

表 9. 土地利用計画 (全体)

区分	1期 (ha)		2期 (ha)		全体 (ha)		備考
	1期 (ha)	(%)	2期 (ha)	(%)	全体 (ha)	(%)	
單身寮	4.88	(24.4%)	0.91	(5.5%)	5.79	(15.8%)	
家族用住宅	7.76	(38.8%)	6.43	(38.8%)	14.18	(38.8%)	
幼稚園	0.42	(2.1%)	0.42	(2.5%)	0.84	(2.3%)	3 箇所/1期、3 箇所/2期
小学校	0.36	(1.8%)	0.71	(4.3%)	1.07	(2.9%)	1 箇所/1期、2 箇所/2期
中学校	0.37	(1.8%)	0.37	(2.2%)	0.73	(2.0%)	1 箇所/1期、1 箇所/2期
高校	0.00	(0.0%)	0.62	(3.7%)	0.62	(1.7%)	1 箇所/2期
児童公園	0.34	(1.7%)	0.45	(2.7%)	0.79	(2.2%)	
医療施設	1.25	(6.3%)	1.00	(6.0%)	2.25	(6.2%)	25 ユニット/1期、20 ユニット/2期
消防署	0.00	(0.0%)	0.30	(1.8%)	0.30	(0.8%)	
商業施設	0.80	(4.0%)	1.60	(9.7%)	2.40	(6.6%)	1 箇所/1期、1 箇所/2期
地域公園	0.50	(2.5%)	1.00	(6.0%)	1.50	(4.1%)	1 箇所/1期、1 箇所/2期
道路	3.33	(16.7%)	2.76	(16.7%)	6.10	(16.7%)	
全体	20.00	(100.0%)	16.57	(100.0%)	36.57	(100.0%)	

添付資料

(2) ドンナイ・労働者向け市街地の開発フレームワーク

ドンナイ・労働者向け市街地の開発フレームワーク

表1. 労働者および居住者の人口予測(ロテコおよびアマタ工業団地労働者)

項目	単位	人数	計算式	備考
[1] 労働者人口	人	66,000		既存の工業団地労働者数を基に、将来の労働者数を予測： (AMATA+LOTECO):18000+6000ha/400ha x 24000/0.75
[2] 流入労働者(新規に住宅を必要としている労働者)人口	人	39,600	[1] x 60%	越国他工業団地における計画値を参考
[3] 単身労働者人口	人	27,720	[2] x 70%	アンケート調査による割合
[4] 帯家族労働者人口	人	11,880	[2] x 30%	アンケート調査による割合
[5] 帯家族労働者本人を除いた家族人口	人	35,640	[4] x 3	平均1世帯4人と仮定
総人口	人	75,240	[3]+[4]+[5]	

表2. 都市インフラの需要予測

部門	項目	人口	原単位	coef.	数量	適法法律・規定	備考
上水道	一般(家庭)	75,240	120 lpcd	1	9,029 m3/d	QCXDVN 01:2008, Table 5.2	最低値
	社会インフラ	75,240	120 lpcd	0.1	903 m3/d	QCXDVN 01:2008, Item 5.3.1-2)	一般(家庭) 給水量の10%
	その他(都市インフラ維持管理)	75,240	120 lpcd	0.08	722 m3/d	QCXDVN 01:2008, Item 5.3.1-2)	一般(家庭) 給水量の8%
	Total			0.8	10,654 m3/d		
下水道	一般(家庭)	75,240	120 lpcd	0.8	7,223 m3/d	QCXDVN 01:2008, Item 6.1.1-4)	一般(家庭) 給水量の最低80%
	社会インフラ	75,240	300 W/pop	1	23 MVA	QCXDVN 01:2008, Table 7.1	
	その他(都市インフラ維持管理)	75,240	300 W/pop	0.35	8 MVA	QCXDVN 01:2008, Table 7.2	一般(家庭) 給水量の35%
	Total			0.1	2 MVA	規定なし	一般(家庭) 給水量の10%
廃棄物 (ゴミ)	一般(家庭)	75,240	1 kg/pop/day	1	33 MVA		
					75 ton/day	QCXDVN 01:2008, Table 6.2	

表3. 必要住宅面積の算出

分類	項目	人口	原単位	面積など	適応法律・規定
単身寮	部屋数	27,720	4 pop/room	6,930 room	4人相部屋; 現状の民間賃貸に準じる
	一人当りの占有面積	27,720	7 m2/pop	194,040 m2	VN-MOCの標準設計Type A1.3に準じる
	一人当りの共有面積	27,720	2 m2/pop	48,510 m2	占有面積の25%
	一人当りの公共設備面積	27,720	2 m2/pop	48,510 m2	1/6階を公共設備・施設として活用
住宅(単身寮)面積小計				291,060 m2	
家族用住宅	部屋数	47,520	4 pop/room	11,880 room	4人1家族と想定
	一人当りの占有面積	47,520	10 m2/pop	475,200 m2	VN-MOCの標準設計Type B1.1に準じる
	一人当りの共有面積	47,520	3 m2/pop	118,800 m2	占有面積の25%
	一人当りの公共設備面積	47,520	3 m2/pop	118,800 m2	1/6階を公共設備・施設として活用
住宅(家族用住宅)面積小計				712,800 m2	
総住宅面積				1,003,860 m2	

表4. 住宅施設の建築面積

項目	床面積 (m2)	階数	建築面積 (m2)	適応法律・規定
単身寮	建築面積	6	48,510	max. 6th floor w/o elevator, incl. 1 utility floor
	敷地面積	建築率		適応法律・規定
		50%	97,020	Max75%; QCXDVN 01:2008, Table 2.7a
家族用住宅	建築面積	6	118,800	max. 6th floor w/o elevator, incl. 1 utility floor
	敷地面積	建築率		適応法律・規定
		50%	237,600	Max75%; QCXDVN 01:2008, Table 2.7a
TOTAL HOUSING LOT AREA			334,620 m2	

表 5. 社会インフラ施設(教育施設)に必要な面積

対象単位	収容人数	必要施設数	基準	備考
幼稚園	2,376 seat	10 unit	QCXDVN 01:2008, Table 2.1	児童数50席/1,000人; 8m2/席
一人当たりの面	1施設当たりの面	全体面積	Decision14/2008/QD-BGDDT	最大10クラス, 25人/クラス= 250席/園, 2,000m2/園 (建築, 40%, 公園 60% = 30% 運動場 + 30% 児童公園)
建築	8 m2	20,000 m2		
8,000 m2	運動場	児童公園		
6,000 m2	収容人数	必要施設数		
小学校	700 seat	5 unit	QCXDVN 01:2008, Table 2.1	児童数65席/1,000人; 6m2/席
3,089 seat	1施設当たりの面	全体面積	Decisions1/2007/QD-BGDDT	最大4クラス/学年x5=20クラス, 最大35席/クラス= 700席/学校, 4200m2/学校 (建築.30%, 施設 15%, 運動場 40%, 児童公園 15%)
一人当たりの面	1施設当たりの面	21,000 m2		
6 m2	運動場	児童公園		
建築	8,400 m2	3,150 m2		
9,450 m2	収容人数	必要施設数		
中学校	560 seat	5 unit	QCXDVN 01:2008, Table 2.1	55 席/1,000 人; 6m2/席
2,614 seat	1施設当たりの面	全体面積	Decision07/2007/QD-BGDDT	最大4クラス/学年x4= 16クラス, 最大45席/クラス= 720席/学校, 4320m2/学校 (建築.30%, 施設 15%, 運動場 40%, 児童公園 15%)
一人当たりの面	1施設当たりの面	16,800 m2		
6 m2	運動場	児童公園		
建築	6,720 m2	2,520 m2		
7,560 m2	収容人数	必要施設数		
高校	945 seat	2 unit	QCXDVN 01:2008, Table 2.1	40 席/1,000 人; 6m2/席
1,901 seat	1施設当たりの面	全体面積	Decision07/2007/QD-BGDDT	最大9クラス/学年= 27クラス, 最大45席/クラス= 1215席/学校, 7290m2/学校 (建築.30%, 施設 15%, 運動場40%, 児童公園 15%)
一人当たりの面	1施設当たりの面	11,340 m2		
6 m2	運動場	児童公園		
建築	4,536 m2	1,701 m2		
5,103 m2		69,140 m2		
社会インフラ施設(教育施設)の面積				

表 6. 社会インフラ施設(教育施設以外)に必要な面積

項目	対象単位	原単位(m2)	面積など	適応法律・規定	備考
医療施設	75 unit	500 m2	37,500 m2	QCXDVN 01:2008, Table 2.1	1 ユニット(500m2)/1,000人
消防施設	1 unit	3,000 m2	3,000 m2	QCXDVN 01:2008, Item 2.7.4	居住地域において半径 5km 円内1箇所(標準)
警察	-	-	-		居住地域において半径 1km 円内1箇所
郵便局	-	-	-		居住地域において半径 1km 円内1箇所
商業施設	4 unit	8,000 m2	32,000 m2	QCXDVN 01:2008, Table 2.1	1 箇所 (8,000m2) / 居住地域(最大, 20,000人)
地域公園	4 unit	5,000 m2	20,000 m2	QCXDVN 01: 2008, Item 2.6.3	1 箇所 (5,000m2) / 居住地域(最大, 20,000人)
社会インフラ施設(教育施設以外)の面積					

表 7. 都市インフラ施設に必要な面積

項目	割合	面積など	適応法律・規定	備考
全体開発面積				
道路および歩道	20%	99,252 m2	適用なし	道路計画に従って道路面積が決まる。

表 8. 土地利用計画 (1期)

区分	面積(ha)	
	1期	(%)
單身寮	9.70	(16.3%)
家族用住宅	23.76	(39.9%)
幼稚園	1.40	(2.4%)
小学校	1.79	(3.0%)
中学校	1.43	(2.4%)
高校	0.96	(1.6%)
児童公園	1.34	(2.2%)
医療施設	3.75	(6.3%)
消防署	0.30	(0.5%)
商業施設	3.20	(5.4%)
地域公園	2.00	(3.4%)
道路	9.93	(16.7%)
TOTAL	59.55	(100.0%)

表 9. 土地利用計画 (全体)

区分	1期 (ha)		2期 (ha)		全体 (ha)		備考
	面積	(%)	面積	(%)	面積	(%)	
單身寮	1.96	(16.3%)	7.75	(16.3%)	9.70	(16.3%)	
家族用住宅	5.17	(43.1%)	18.59	(39.1%)	23.76	(39.9%)	
幼稚園	0.28	(2.3%)	1.12	(2.4%)	1.40	(2.4%)	2箇所/1期、8箇所/2期
小学校	0.36	(3.0%)	1.43	(3.0%)	1.79	(3.0%)	1箇所/1期、4期/2期
中学校	0.00	(0.0%)	1.43	(3.0%)	1.43	(2.4%)	5箇所/2期
高校	0.00	(0.0%)	0.96	(2.0%)	0.96	(1.6%)	2箇所/2期
児童公園	0.18	(1.5%)	1.15	(2.4%)	1.34	(2.2%)	
医療施設	0.75	(6.3%)	3.00	(6.3%)	3.75	(6.3%)	15ユニット/1期、60ユニット/2期
消防署	0.00	(0.0%)	0.30	(0.6%)	0.30	(0.5%)	2期
商業施設	0.80	(6.7%)	2.40	(5.0%)	3.20	(5.4%)	1箇所/1期、3箇所/2期
地域公園	0.50	(4.2%)	1.50	(3.2%)	2.00	(3.4%)	1箇所/1期、3箇所/2期
道路	2.00	(16.7%)	7.93	(16.7%)	9.93	(16.7%)	
TOTAL	12.00	(100.0%)	47.55	(100.0%)	59.55	(100.0%)	

添付資料

(3) フンイエン(第1期開発)、ドンナイ(第1期開発)の鳥瞰図



フンイェン第1期開発 (20ha) の鳥瞰図

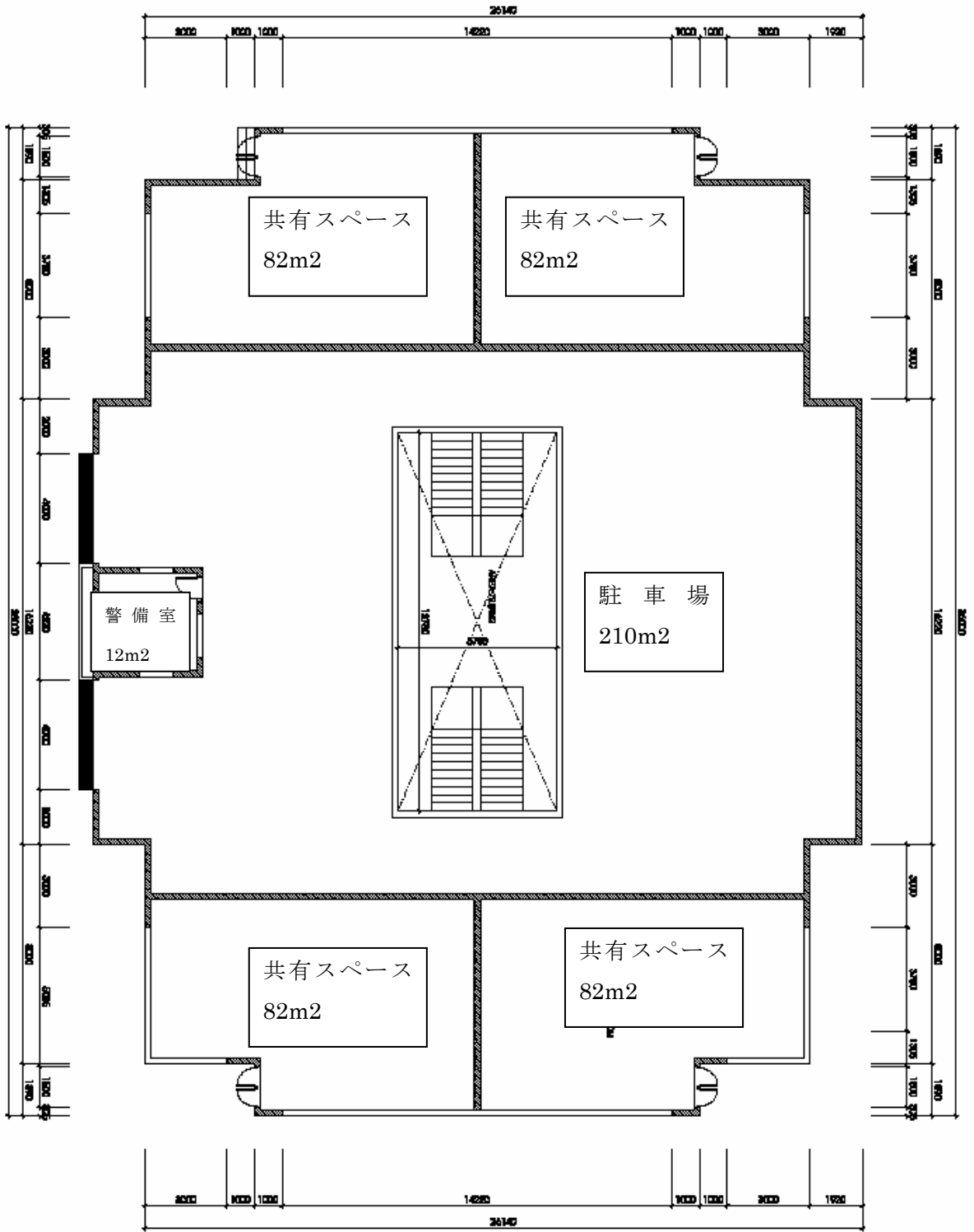


ドンナイ第1期開発（12ha）の鳥瞰図

添付資料

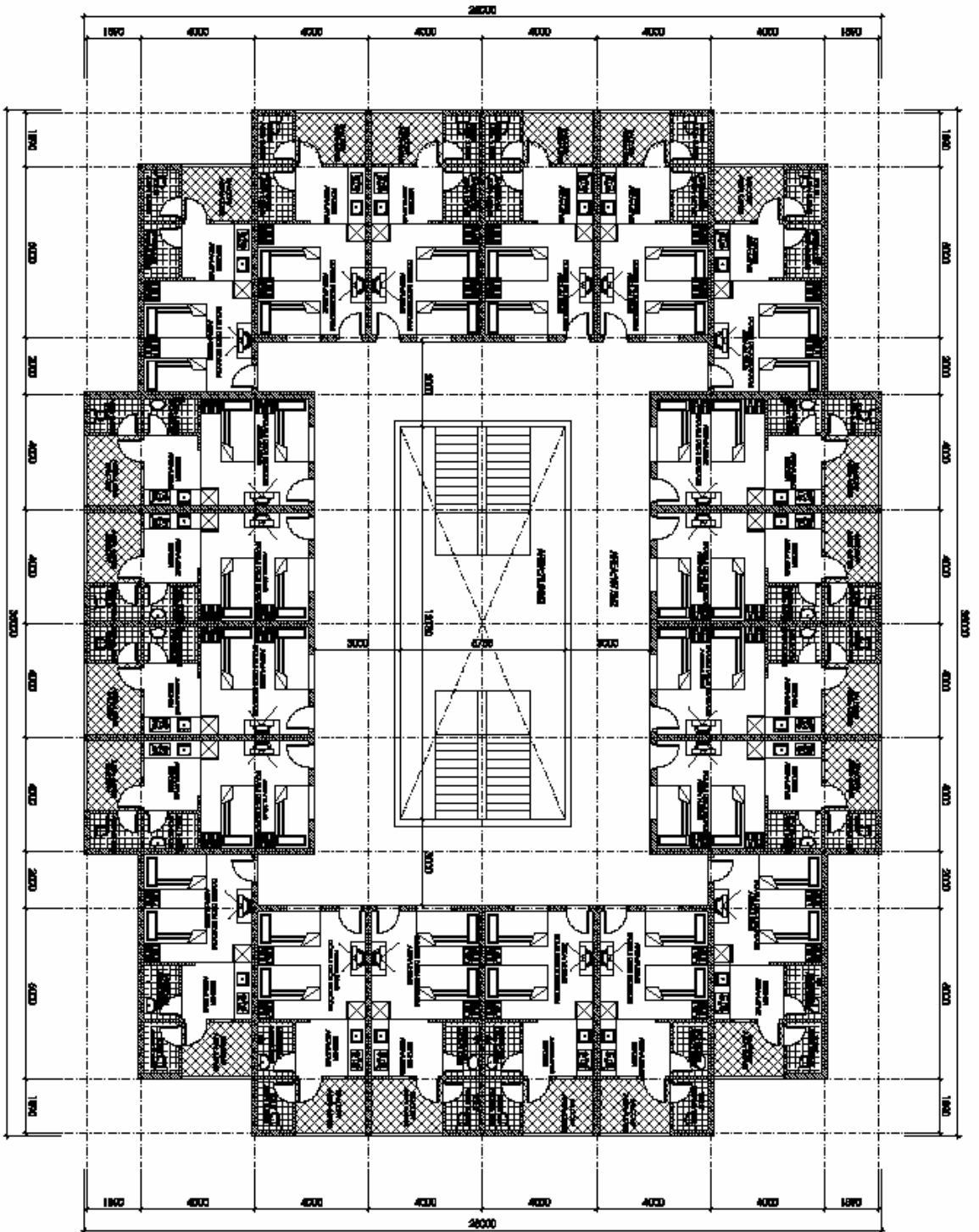
(4) 標準单身寮の図面類および概観図

MẶT BẰNG TẦNG 1
PLAN 1ST FLOOR



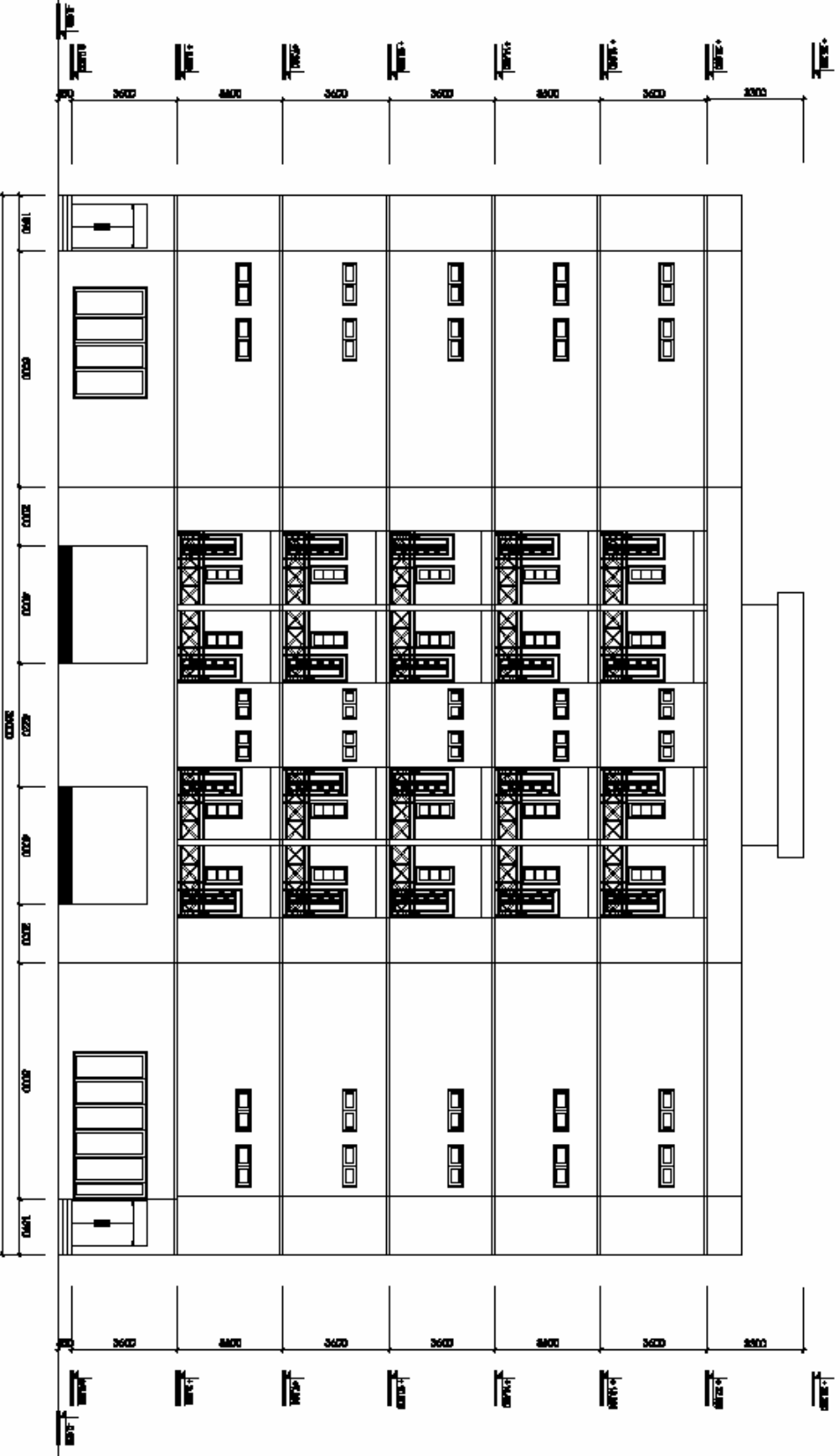
1. 単身寮 1階平面図

MẶT BẰNG TẦNG 2,3,4,5,6
 PLAN 2ND,3RD,4TH,5TH,6TH FLOOR



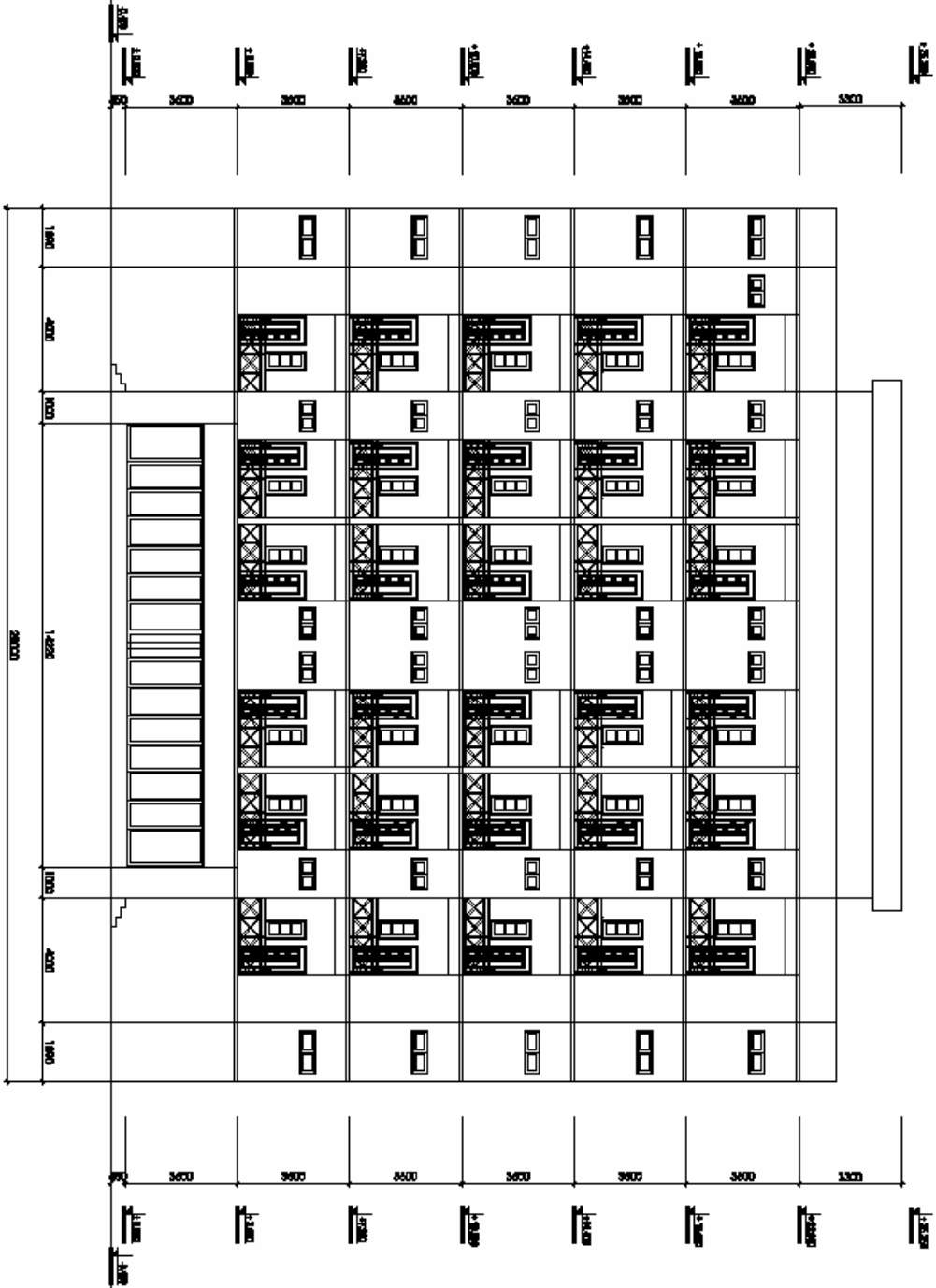
2. 单身寮 2-6階平面図

MẶT DỰNG 1
ELEVATION 1ST



3. 单身寮 立面图 1

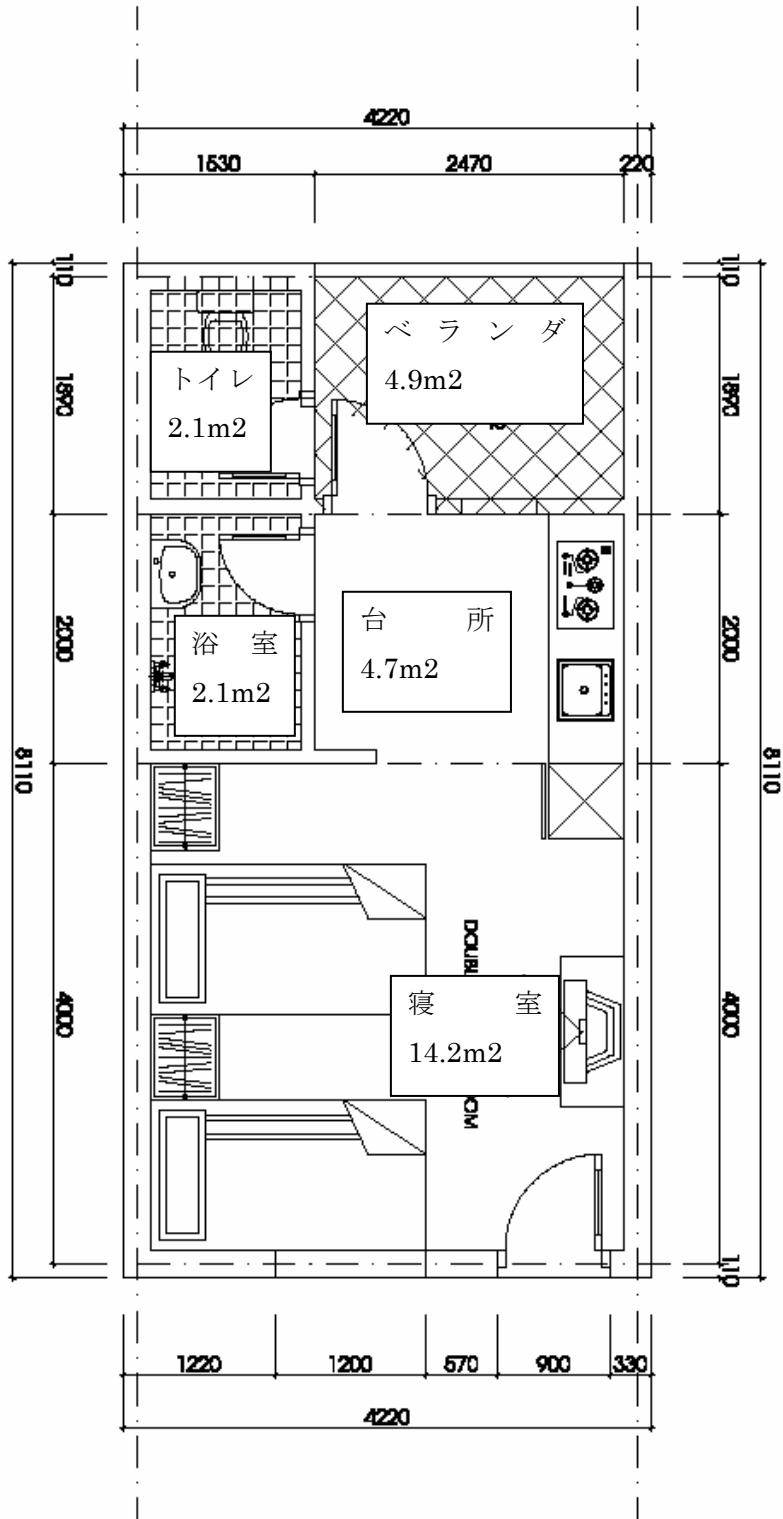
MẶT DỰNG 2
ELEVATION 2ND



4. 单身寮 立面图 2

MẶT BẰNG PHÒNG Ở CÔNG NHÂN ĐIỆN HÌNH

AREA: 34 M²



5. 単身寮 部屋のレイアウト図

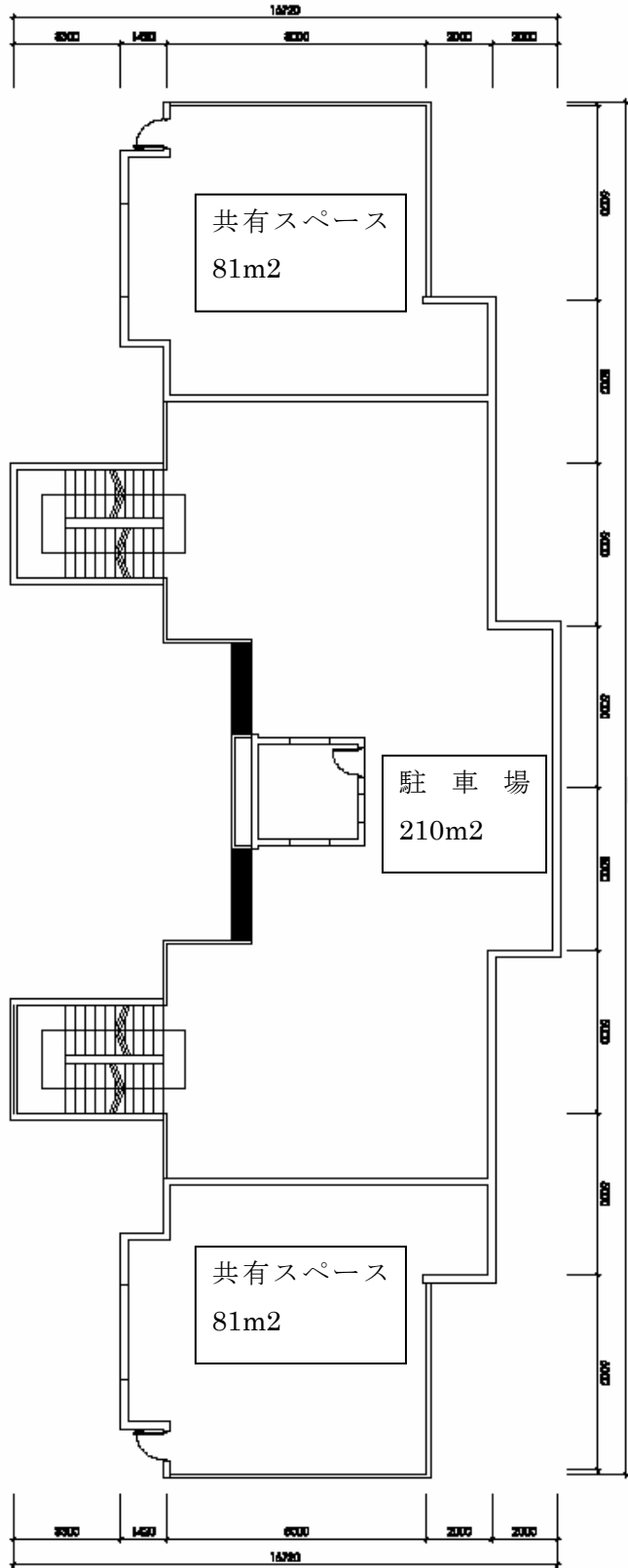


单身寮の概観図

添付資料

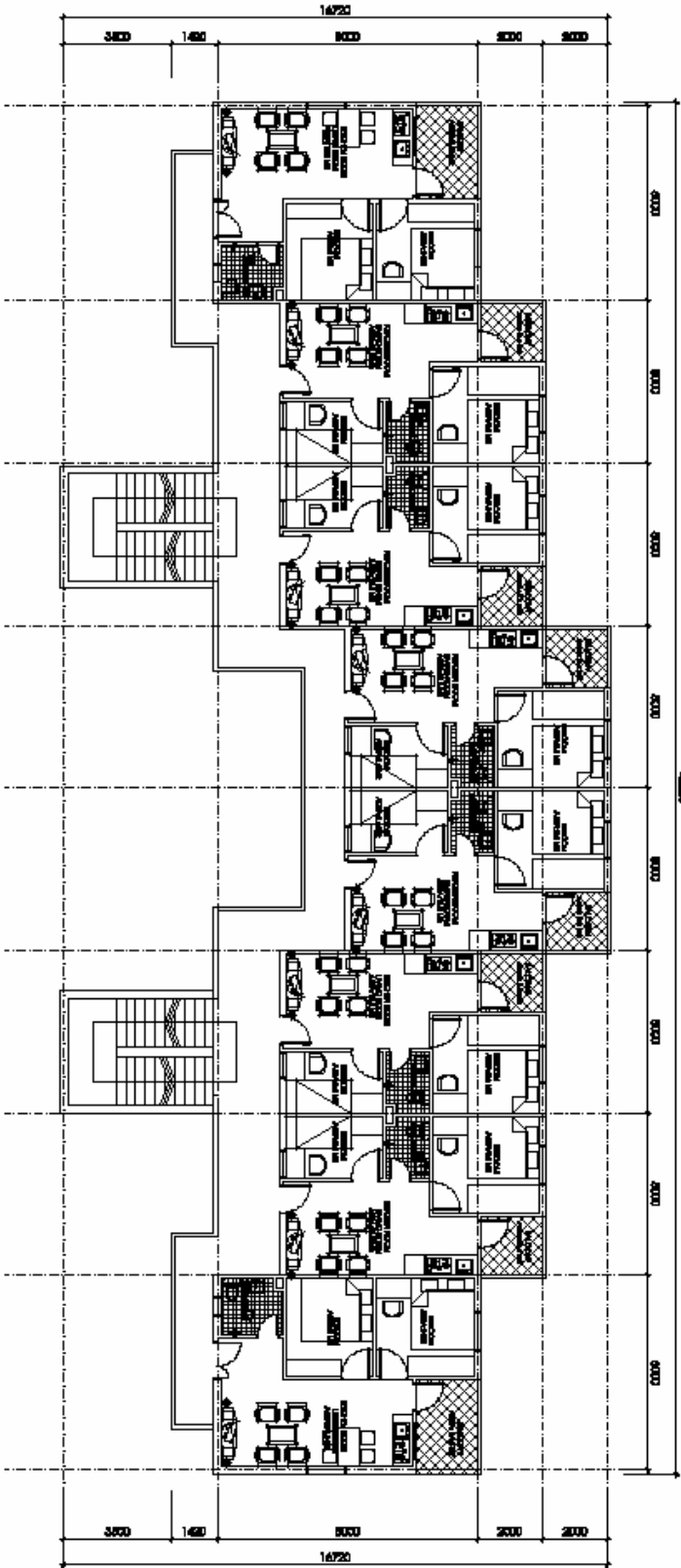
(5) 標準家族用住宅の図面類および概観図

MẶT BẰNG TẦNG 1
PLAN 1ST FLOOR



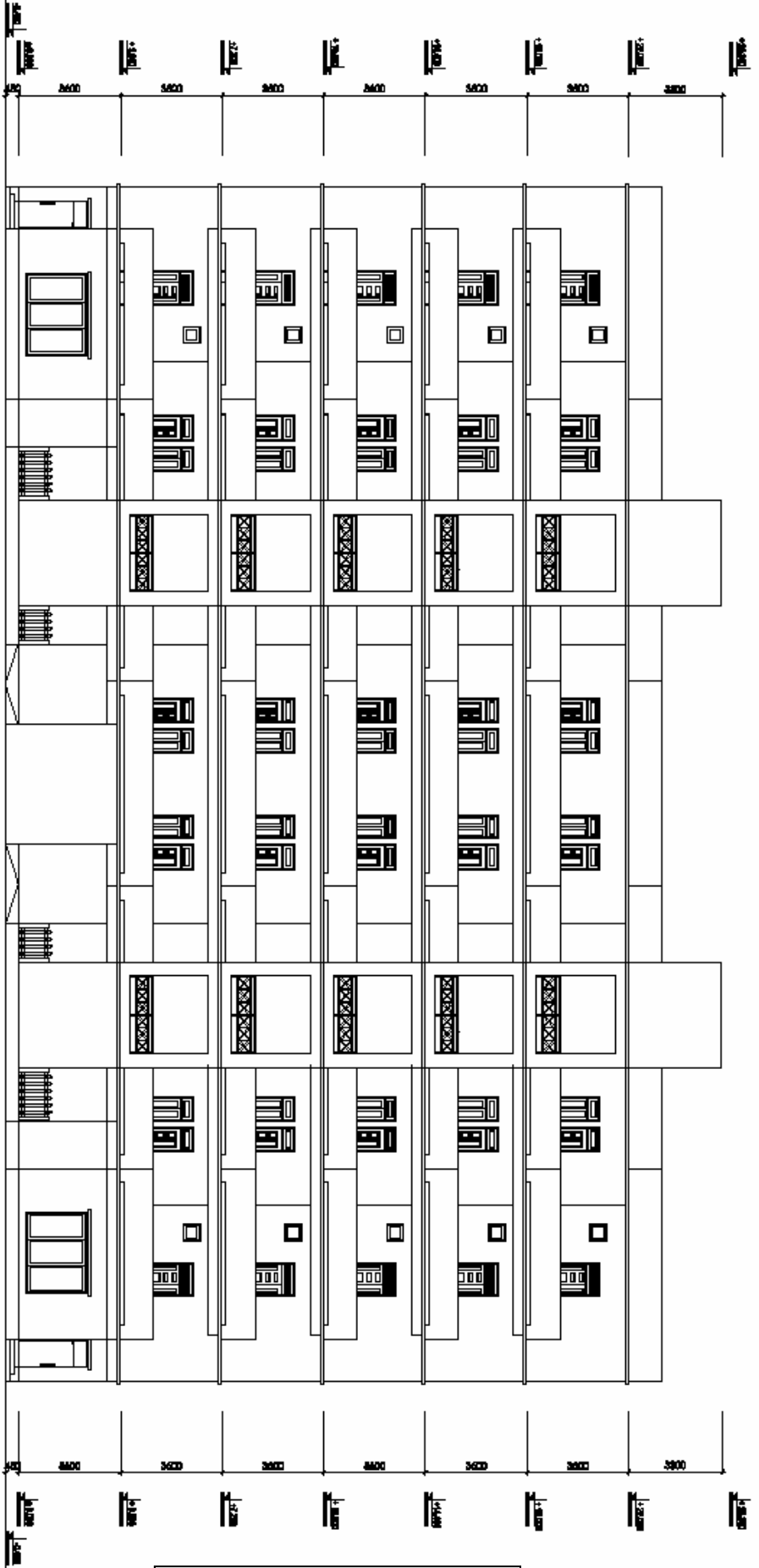
1. 家族用住宅 1階平面図

MẶT BẰNG TẦNG 2,3,4,5,6
PLAN 2ND,3RD,4TH,5TH,6TH FLOOR



2. 家族用住宅 2-6階平面図

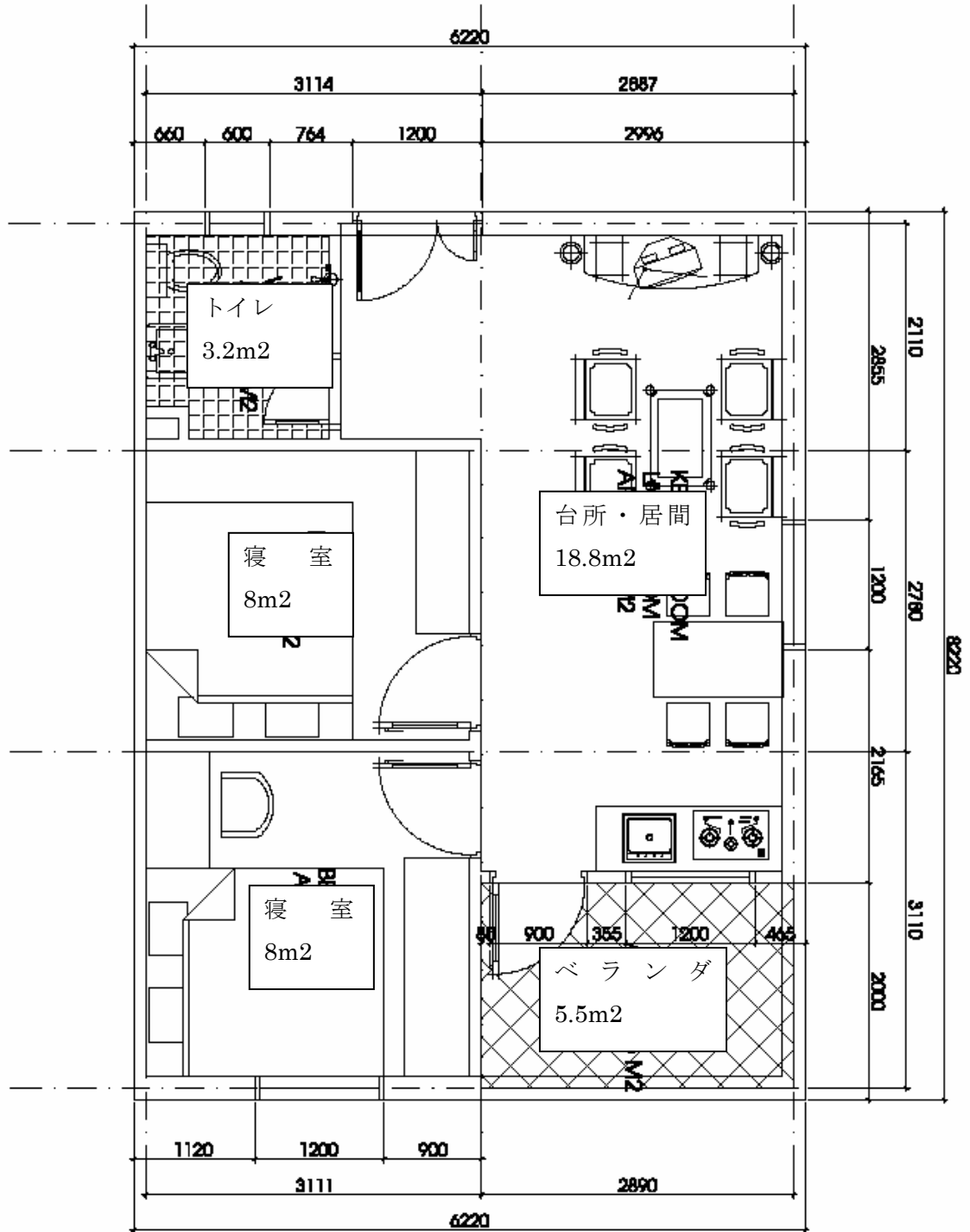
MẶT DỰNG 1
ELEVATION 1ST



3. 家族用住宅 立面图

MẶT BẰNG PHÒNG Ở CÔNG NHẬN ĐIỆN HÌNH

AREA: 46 M²



4. 家族用住宅 部屋のレイアウト図



家族用住宅の概観図

添付資料

(6) 居住環境に関するアンケートおよびヒアリング調査結果

(英文)

**Study on
Living Environment Improvement
around Industrial Parks in Vietnam**

April/May 2010

Summary

In April and May 2010, a research with title “Study on Living Environment Improvement around Industrial Parks in Vietnam” was conducted. The study purposes are 1) preparation of report on living environment survey for factory employees, 2) formulation of draft basic direction for living environment improvement around the industrial parks, 3) proposal of new related institution to Vietnamese government, and 4) formulation of draft living environment improvement plan at the study areas.

The 3 selected areas are:

- (1) Long Binh Ward, Bien Hoa City, Dong Nai Province
- (2) Kim Chung Commune, Dong Anh District, Hanoi City
- (3) Nghia Hiep and Lieu Xa Commune, Yen My District, Hung Yen Province

In each area, the research comprises a site survey, a hearing survey with commune/ward leaders and a questionnaire survey, whose targets are workers who work in industrial parks in the neighborhood.

In total, 894 valid questionnaires were collected in Long Binh. The figures were 453 for Kim Chung, 119 for Lieu Xa and 86 for Nghia Hiep respectively.

Long Binh Ward and Bien Hoa City are seen as one of the pioneer areas in developing industrial parks. A diversified population from the whole country has come here to work for more than 10 years. They comprise now the major part of the ward's population. Most workers work in Amata Industrial Park. Only an insubstantial number of workers live in companies' housing facilities.

Kim Chung Commune is next door to Thang Long Industrial Park, arguably the most successful industrial park in Northern part of Vietnam. Among the 3 survey areas, Kim Chung has the greatest portion of workers living in companies' dormitory. It provides more evidence to the study in differences in behavior/ living styles/ desires between workers with different housing styles.

Lieu Xa and Nghia Hiep are new comers in terms of industrial park development, compared with Long Binh and Kim Chung. There has been industrial development in

Hung Yen Province for 15 years but most factories are not located in industrial park. The operation of Thang Long II Industrial Park will change the structure of industries in the area. Up to now, more factories are scattered in private land, along the main roads, rather than concentrated in industrial parks.

Due to the characteristics, it was a challenge and more time consuming to collect the required the number of samples (200) in Nghia Hiep and Lieu Xa area since workers who work in factories not located in industrial parks were not target of the survey. The number of workers staying in housing facilities by factories was not significant, like in Long Binh case.

Hereunder are results gathered from the questionnaire and hearing surveys from selected areas.

Results of Questionnaire Survey

Kim Chung

Total number of valid questionnaires: 453

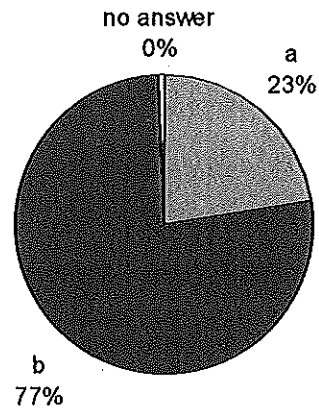
A. General results

A1. Sex

Among the respondents, 22.52% are males and 77.04% are females. 2 persons gave no answers to that questions.

a	b	no answer	Total
102	349	2	453
22.52	77.04	0.44	100.00

a. male b. female

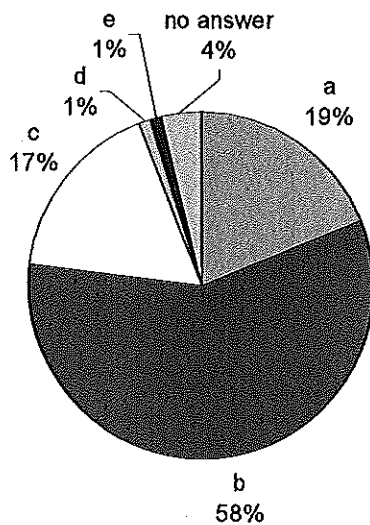


A2. Age

Only 10 persons of the respondents are over 31 years old. The biggest group of age is between 21 and 25 years old, with 58.28%.

a	b	c	d	e	no answer	Total
85	264	78	5	5	16	453
18.76	58.28	17.22	1.10	1.10	3.53	100.00

a. below 21 b. 21-25 c. 26-30 d. 31-35 e. 36-40 f. over 40

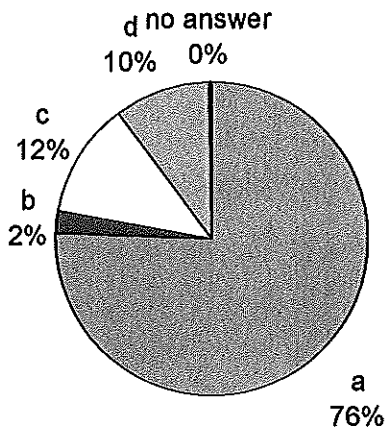


A3. Marital status

By far the largest group consists of single persons, making up 75.5% of the respondents

a	b	c	d	no answer	Total
342	10	55	45	1	453
75.50	2.21	12.14	9.93	0.22	100.00

a. single b. single with child c. married d. married with child

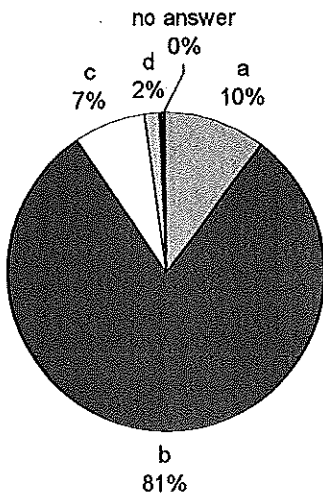


A4. Educational level

80.35% were graduated from highschool. Only 1.77% responded to have university degree.

a	b	c	d	no answer	Total
46	364	33	8	2	453
10.15	80.35	7.28	1.77	0.44	100.00

a. junior high-school b. high school c. colleague d. university



A5. Personal monthly average income

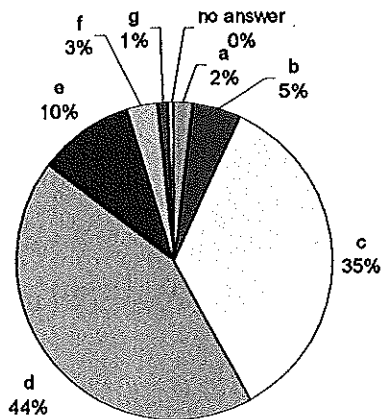
Most of the workers (>78%) responded to earn between 1 and 2 million VND per month, with more than 43% earning between 1.5 and 2 million VND per month.

For those earning less than 1 million VND/month, we take the assumption that they are in the test-phase of work, or they work at the company with incentive salary structure which allows them to earn less during the period of less jobs, less outputs, less overtime and holiday working hours.

Only more than 4% of the respondents earn more than 3 million VND per month.

a	b	c	d	e	f	g	no answer	Total
9	23	158	197	46	13	6	2	264
1.99	5.08	34.88	43.49	10.15	2.87	1.32	0.44	58.28

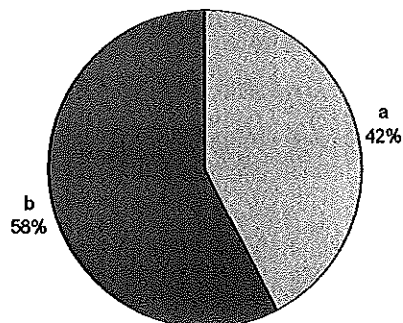
- a. below 0.8mil VND b. 0.8-1.0mil VND c. 1.0-1.5mil VND d. 1.5-2.0mil VND
 d. 2.0-2.5mil VND e. 2.5-3.0mil VND f. 3.0-4.0mil VND g. over 4.0mil VND



A6. Other source of income

44% (201 persons) responded to have other sources of income, either from wife/husband or parents/ children.

We can have the assumption that a part of single workers still need financial support



from their families (parents).

a	b	
86	117	201 answer
42.79	58.21	

a. wife/husband b. parent(s)/child(s)

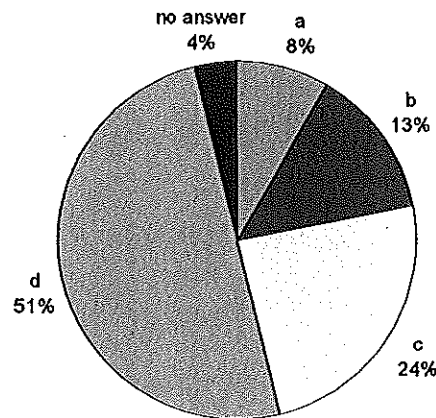
A7. Distance from hometown

Half of the respondents (49.89%) need to spend 3 hours or more for the trip from working place to their hometown. During the questionnaire survey, it was made clear to the respondents that “hometown” means the place they, their families lived before they moved to industrial park to work. Because in Vietnamese terms, “hometown” can be understood as the place of origin of the ancestors – “Que quan”, as registered in the ID.

Only 8.39% responded to live within 1 hour trip area.

a	b	c	d	no answer	Total
38	61	110	226	18	453
8.39	13.47	24.28	49.89	3.97	100.00

a. below 1hr trip b. 1 to 2 hours trip
 c. 2-3 hours trip d. 3 hours and over



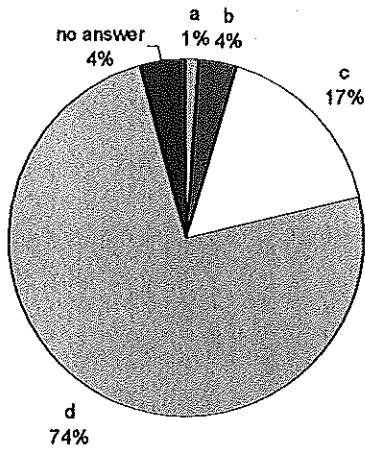
A8. Time basis of distance (Q7) above

As for the question how they take the trip to hometown, 74.39% responded as to use bus as transport mean for the hometown trip.

1.1% responded to “walk” to hometown, probably referring to that their family live around. the area of industrial park.

a	b	c	d	no answer	Total
5	16	76	337	19	453
1.10	3.53	16.78	74.39	4.19	100.00

a. by walk b. by bicycle c. by motorbike d. by bus



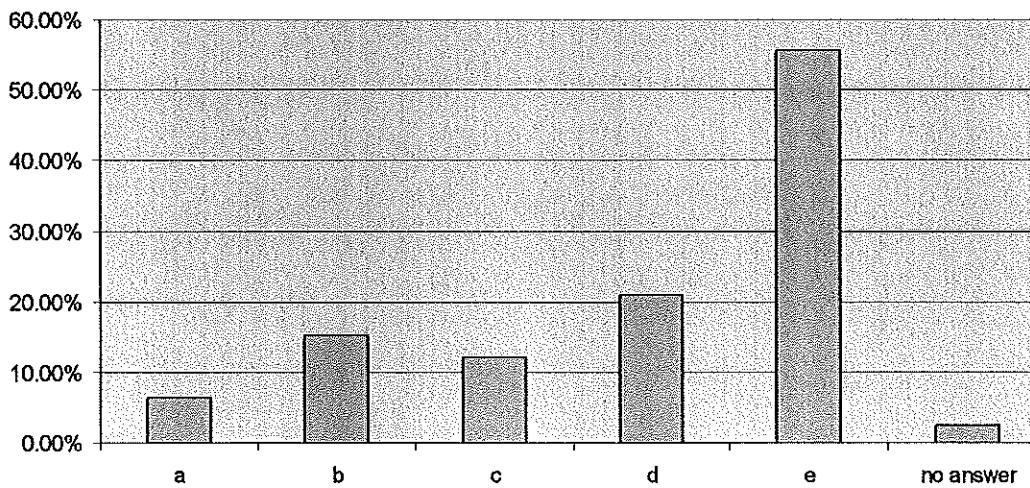
A9. Relations in neighborhood

55.63% responded to have no relatives/friends in the area.

Those with parents/ brothers/sisters in the area were more than 21%.

a	b	c	d	e	no answer
29	69	55	95	252	11
6.40	15.23	12.14	20.97	55.63	2.43

a. parents b. brother/sister c. other relatives d. old friends e. none (alone)

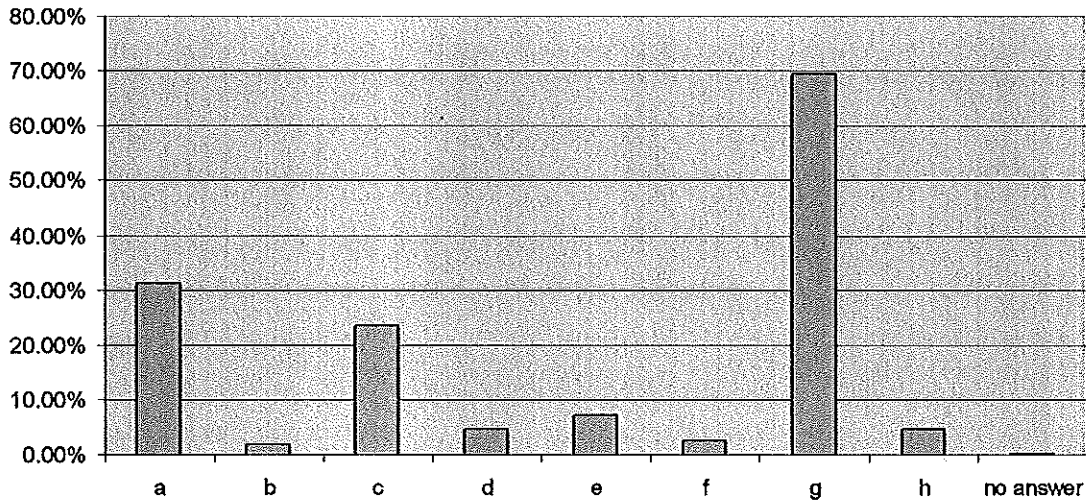


A10. Activities during off-time (answers with multiple choice)

69.54% responded to “stay at room” during off-time, followed by “talking with friends/ relatives” (31.13%) and “go shopping” (23.62%). Only 2.65% responded with “go to drink”, corresponding with the low ratio of males in the area.

a	b	c	d	e	f	g	h	no answer
141	8	107	21	33	12	315	21	1
31.13	1.77	23.62	4.64	7.28	2.65	69.54	4.64	0.22

- a.talking with or visiting friends/relatives
- b.stay overnight with friends/relatives c.go (window) shopping in surrounding
- d.go to city center e.play sport f.go to drink
- g.stay at room (reading a book/ listen to the music/ see TV/movie)
- h.others



A11. Activities time range

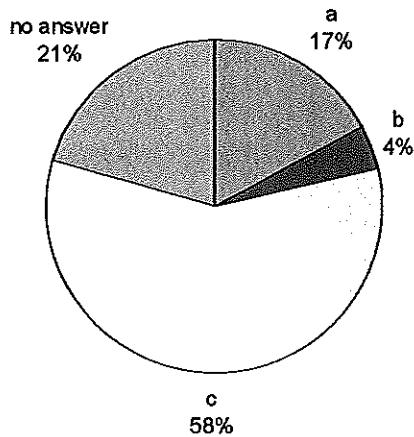
The question was somewhat confusing to the respondents, most of them stated the working hours as the answers, commonly in the working hours, depending on what shift they have.

A12. Personal relations

58% of the respondents answered with “no lover” with high ratio of non-respondents (20.5%).

a	b	c	no answer	Total
78	19	263	93	453
17.22	4.19	58.06	20.53	100.00

a. Have a lover b. Have a plan for married within 1 year c. No lover



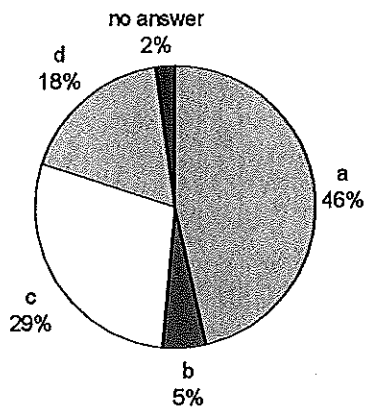
A13. Willingness to stay

46.36% responded “need to stay here as long as I can”, followed by “stay until getting married” (28.7%).

17.66% want to go back home as soon as possible.

a	b	c	d	no answer	Total
210	23	130	80	10	453
46.36	5.08	28.70	17.66	2.21	100.00

a. Need to stay in this place as long as I can
 b. Need to stay in this place until have a child
 c. Need to stay in this place until get marriage
 d. Want to back hometown soon or as soon as possible



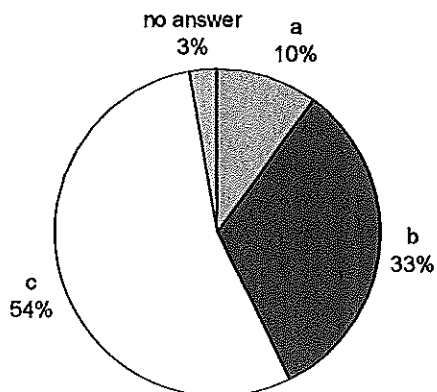
Among “d” respondents, 22 said “because of low salary”. 12 said “if they have job at hometown, they would go back soon”. 4 said they are homesick.

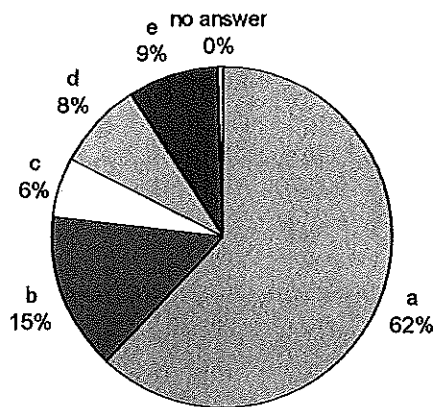
A14. Future life plan

More than 87% responded with “stay with families, parents or children”

a	b	c	no answer	Total
45	149	246	13	453
9.93	32.89	54.30	2.87	100.00

- a. Stay alone, leave family at hometown
- b. Stay with family, including children
- c. Stay with family and parent(s)





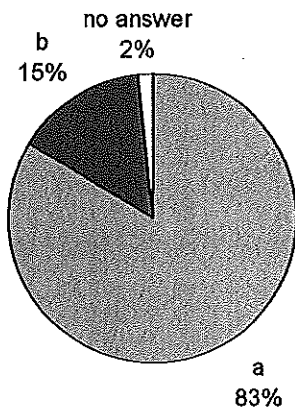
A17. Public utilities

83.66% reported to share toilette/kitchen/bathrooms with other rooms.

a	b	no answer	Total
379	67	7	453
83.66	14.79	1.55	100.00

a.Shared with other rooms

b.Have in own room/house

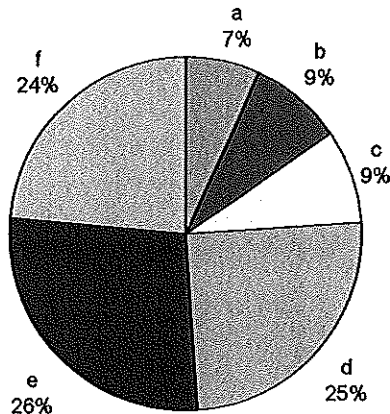


A18. Monthly rental fee

Almost 73% responded to spend 300,000VND or more for monthly rental fee. 6.4% reported to have “free monthly rental fee” – either in own/parents or companies’ house.

a	b	c	d	e	f	no answer	Total
29	37	38	108	119	103	19	453
6.40	8.17	8.39	23.84	26.27	22.74	4.19	100.00

- a. free of charge b. below 0.2mil VND c. 0.2-0.3mil VND
d. 0.3-0.4mil VND e. 0.4-0.5mil VND f. Over 0.5mil VND

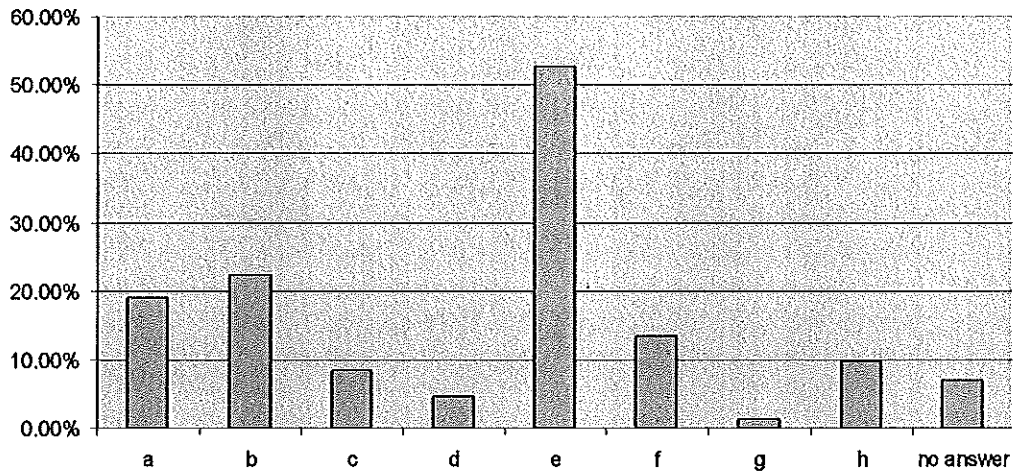


A19. Most insufficient housing condition (multiple choice)

52.76% complained about “rental fee”, followed by “toilette” (22.3%) and “room area” (18.98%).

a	b	c	d	e	f	g	h	no answer
86	101	38	21	239	61	6	44	31
18.98	22.30	8.39	4.64	52.76	13.47	1.32	9.71	6.84

- a. room area b. toilet c. bath d. kitchen e. rental fee
f. privacy g. rental regulation h. others



Among those answering with “others”, 6 complained or lack of power, water.

A20. Most insufficient living condition (multiple choice)

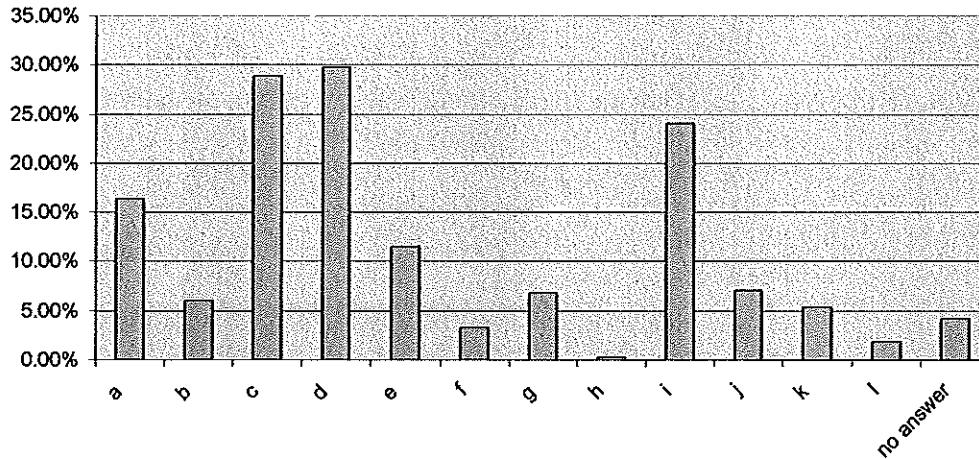
Security (28.92%), Education for own (29.8%) and Transportation (24.06%) were mentioned most by the respondents.

Lack of café/restaurant was mentioned only by 1 person.

a	b	c	d	e	f	g
74	27	131	135	52	15	31
16.34	5.96	28.92	29.80	11.48	3.31	6.84

h	i	j	k	l	no answer
1	109	32	24	8	19
0.22	24.06	7.06	5.30	1.77	4.19

- a. sanitation
- b. medical
- c. security
- d. education for own
- e. education for child
- f. kinder garden
- g. market
- h. cafe/restaurant
- i. Transportation
- j. park/green
- k. entertainment
- l. others



A21. If any difficulties on living environment request to be considered/ improved

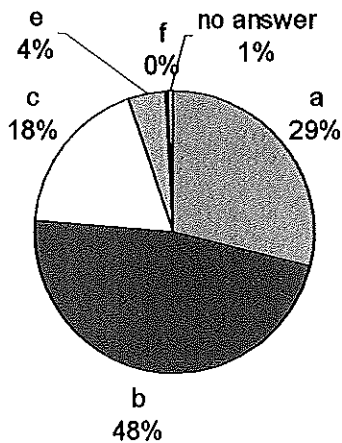
Most (52 out of 127) complained of low salary and high price level in the area.

A22. Commuting method

47.46% reported to commute by bicycle, followed by “walk” (28.92%)

a	b	c	e	f		
131	215	83	20	1	3	453
28.92	47.46	18.32	4.42	0.22	0.66	100.00

- a. walking b. bicycle c. motorbike d. bike taxi
 e. public bus f. company busg. others

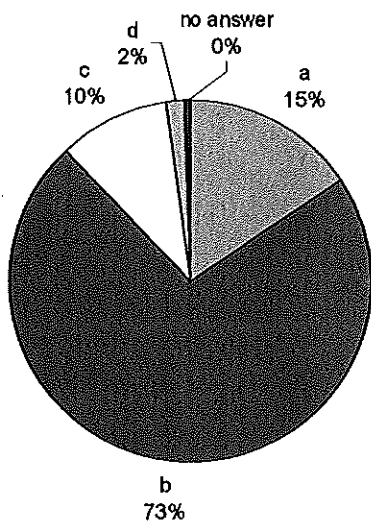


A23. Commuting time

72.41% need 15 to 30 minutes to get to work. 15.45% reported to need less than 15 minutes.

a	b	c	d	no answer	Total
70	328	45	8	2	453
15.45	72.41	9.93	1.77	0.44	100.00

- a. below 15 min. b. 15-30 min. c. 30-60 min d. over 1hr

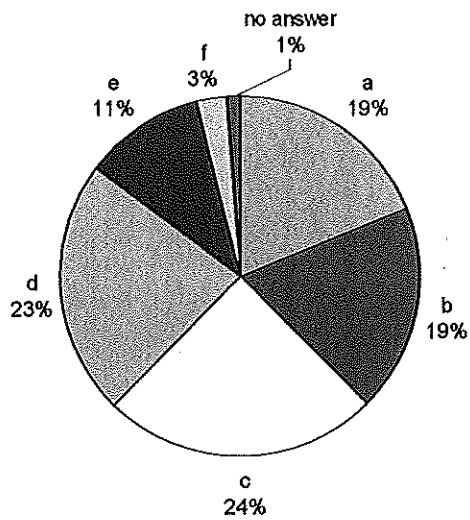


A24. Working period in the industrial park

The answers varied over 0 to 5 years stretch, with only 2.87% responding to have worked here from 5 to 10 years. No one answered to have worked here for more than 10 years.

a	b	c	d	e	f	no answer	Total
85	85	112	104	49	13	5	453
18.76	18.76	24.72	22.96	10.82	2.87	1.10	100.00

- a. below 6 months b. 6 to 12 months c. 1-2 years d. 2-3 years
 e. 3-5 years f. 5-10 years g. over 10 years

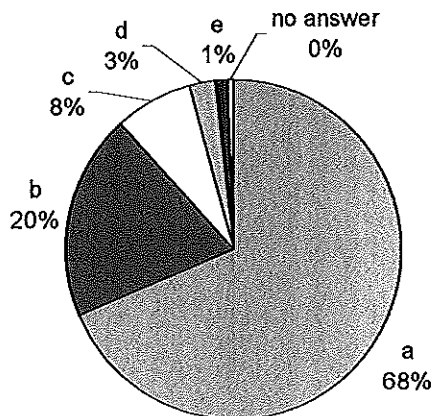


A25. Experience on job changing

More than 88% reported to have changed job 1 time (19.65%) or yet to change job (68.65%). The assumption might be: (1) they have stayed here not long enough (<3 years) or (2) They are somewhat satisfied with working for Japanese factories so that job changing does not occur more frequently.

a	b	c	d	e	no answer	Total
311	89	34	12	5	2	453
68.65	19.65	7.51	2.65	1.10	0.44	100.00

a. none b. 1 time c. 2 times d. 3 times e. 4 times or more



A26. Reason to work in factories

The answers varies, with 25.83% responding “better working environment” and 20.75% responding “many of the same hometown in the area”.

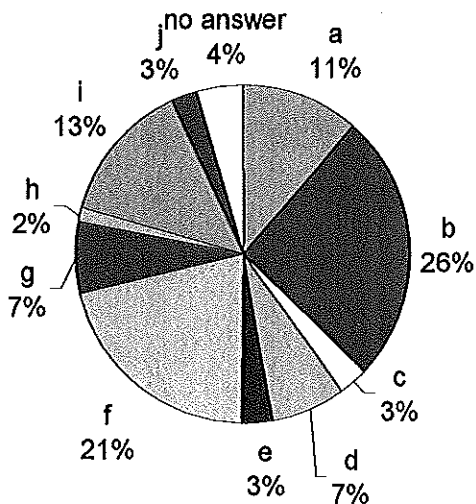
Only 1.55% answered “because I want to live in urban area”.

a	b	c	d	e	F
51	117	13	33	14	94
11.26	25.83	2.87	7.28	3.09	20.75

g	h	i	j	no answer	Total
31	7	61	12	20	453
6.84	1.55	13.47	2.65	4.42	100.00

Only 11.26% said, they work here because of high/stable salary.

- a.High/stable income/salary
- b.Better working environment
- c.Skillful work
- d.Meets with personallty
- e.Can commute from (parent) house
- f.Many people from same home town came to work in this place
- g.Can go to work together with relevant (family and/or friend)
- h.Want to living in urbanized area
- i.No other choice
- j.Others

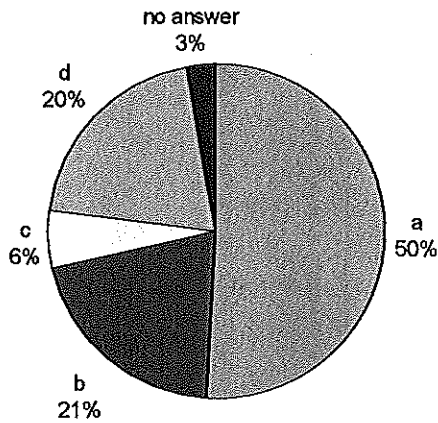


A27. Willingness to work as industrial workers

More than 50% of the respondents want to work for several years only. Only 5.74% want to work until have child. 20.53% want to work until marriage. 20% have intention to work permanently as industrial workers.

a	b	c	d	no answer	Total
230	93	26	91	13	453
50.77	20.53	5.74	20.09	2.87	100.00

- a. For several years only
- b. Until get married
- c. Until have a child
- d. Lifework (until retirement)

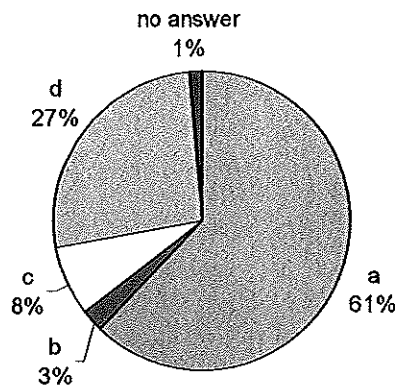


A28. Desirable career path

61.81% stated they want to work for one company and get promotion, followed by "No intention to work permanently as industrial workers" (26.71%).

a	b	c	d	no answer	Total
280	12	34	121	6	453
61.81	2.65	7.51	26.71	1.32	100.00

- a. Working permanently for one company and get promotion
- b. Changing job for several times to have more different experience
- c. Changing job until meets with sufficient working condition
- d. No intention to work permanently as industrial workers



Among “d” answers, most said, because of low salary (17 persons), unstable job (11 persons) and overload of work (9 persons)

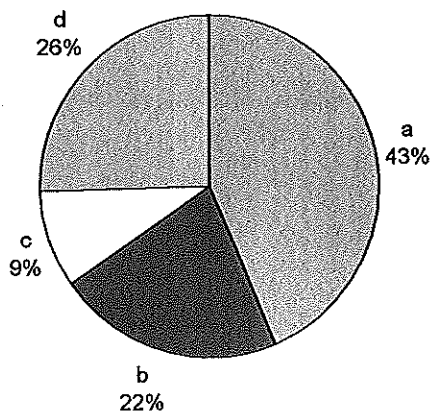
A29. Desirable career path for female workers

For mistakes, some male workers still answered the question, in the assumption what needs they see for their female counterparts.

43.66% responded “to need reinstatement after birth”.

a	b	c	d	Total
155	77	32	91	355
43.66	21.69	9.01	25.63	100.00

- a. Need to reinstatement after give birth
- b. Need to reinstatement after child care
- c. Have no intention to reinstatement
- d. Others



A30. Request of ideas to improve

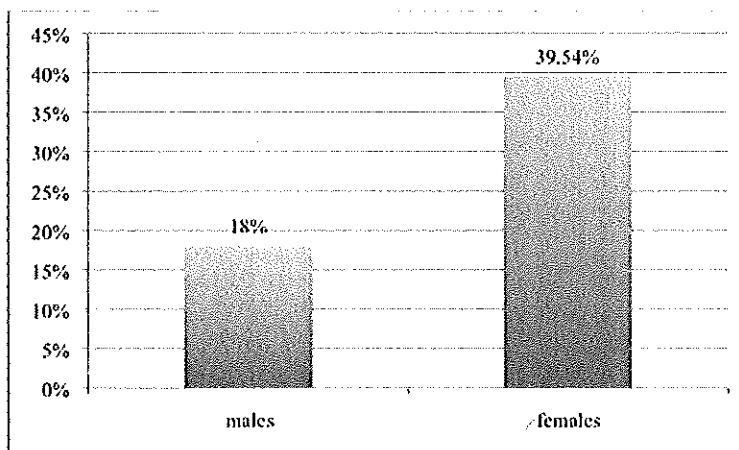
300 persons responded. 162 persons want to have higher and more stable income. 82 want to have more stable jobs. 44 want to have better environment. 23 want the company to have better policy with workers. 14 want to have housing for a long-term future.

B.Differences in responses

between males and females

B5. Personal monthly average income

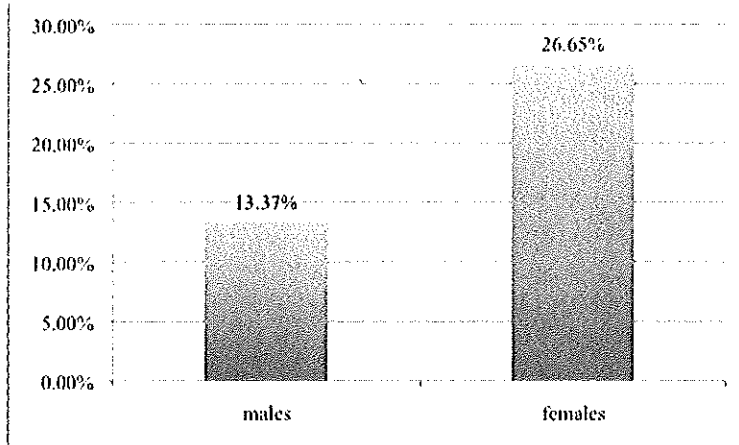
While most males (47%) and females (42%) earn between 1.5 and 2 million VND, only 18% of males reported to earn between 1 and 1.5 million VND, while 39.54% of females still earn in that range.



Percentage of workers earning VND 1 and 1.5million/month

B10. Activities during off-time

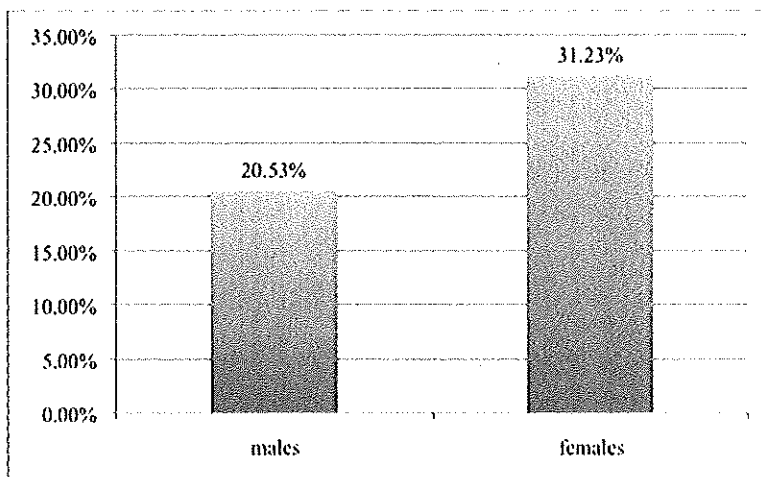
26.65% females reported to go shopping, compared with 13.37% of males.



Percentage of shopping conducted by workers in off-time

B13. Willingness to stay

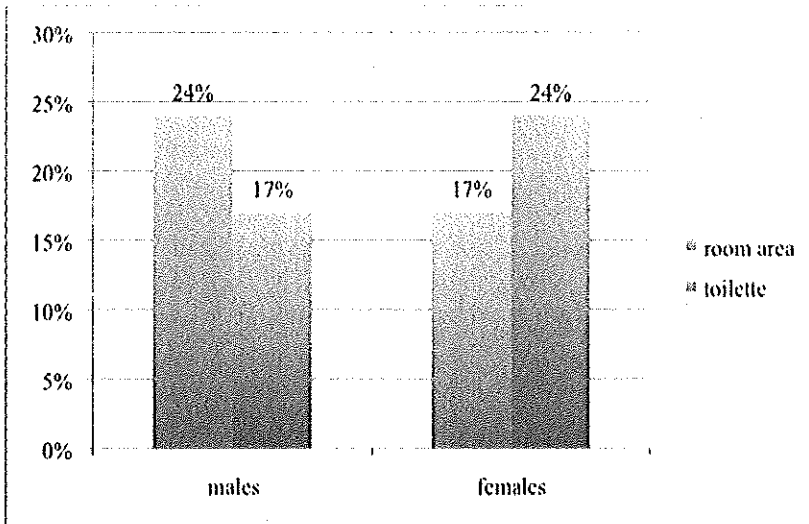
20.53% of males said “they want to stay until marriage”, compared with 31.23% of females.



Percentage of workers “wanting to stay until marriage”

B19. Most insufficient housing condition

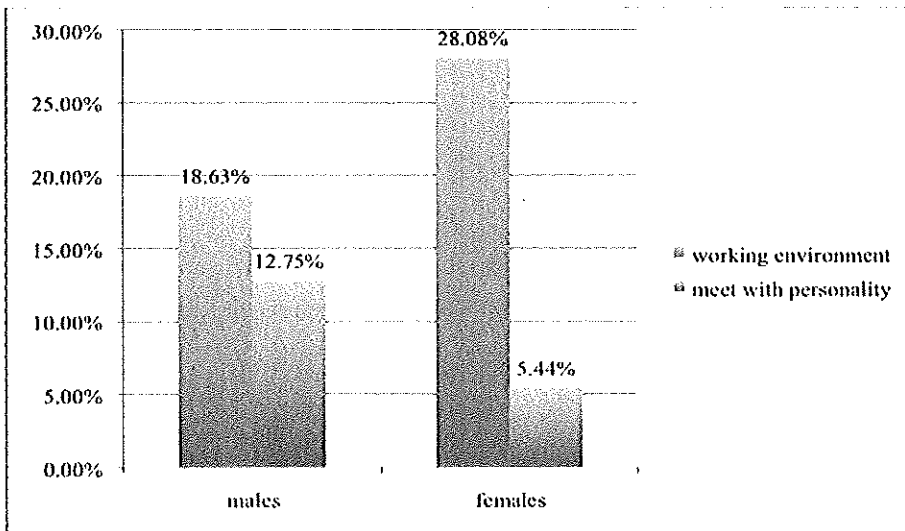
More males complained of “room area” than females (24% versus 17%) while more females complained of “toilette” (17% versus 24%).



Percentage of workers complaining of "room area" and "toilette"

B26. Reason to work in factory

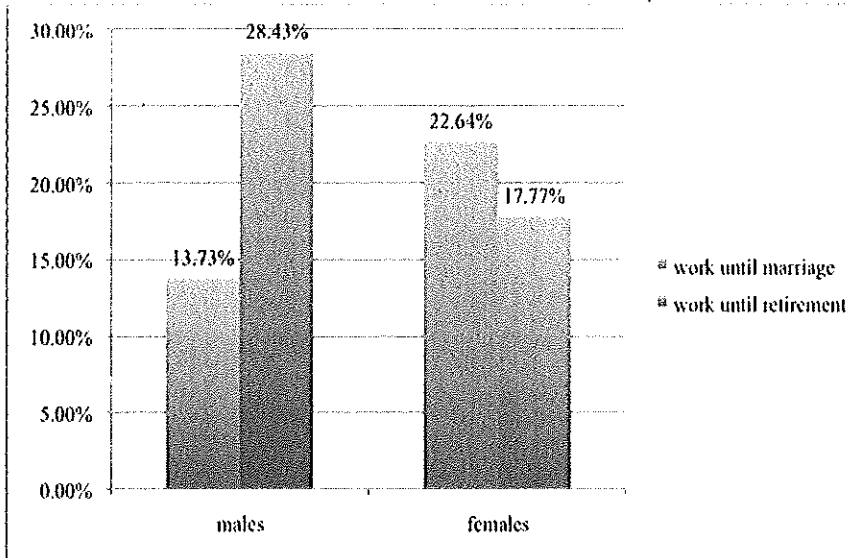
More females appreciated "working environment" than males (18.63% versus 28.08%) while more males appreciated "meet with personality" (12.75% versus 5.44%).



Percentage of workers choose to work because of "working environment" and "meet with personality"

B27. Willingness to work as industrial worker

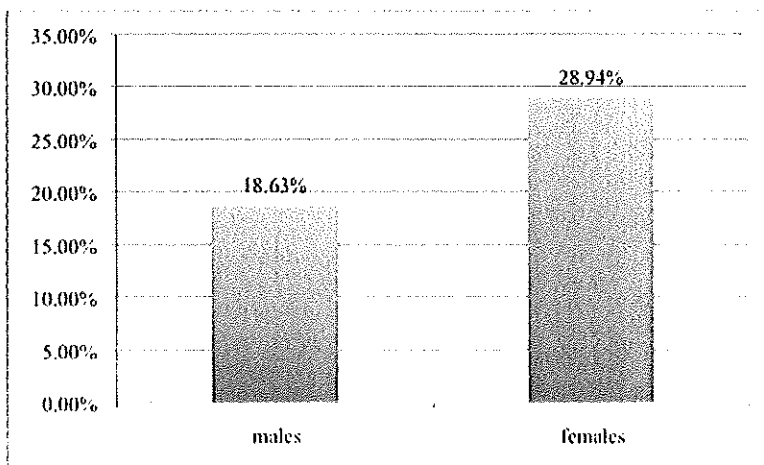
22.64% of females said, they want to work until marriage, versus 13.73% of males. 28.43% of males reported to want to work until retirement, versus 17.77% of females.



Percentage of workers wanting to work "until marriage" and "until retirement"

B28. Desirable career path

18.63% of males said they have no intention to work permanently as industrial workers, versus 28.94% of females.



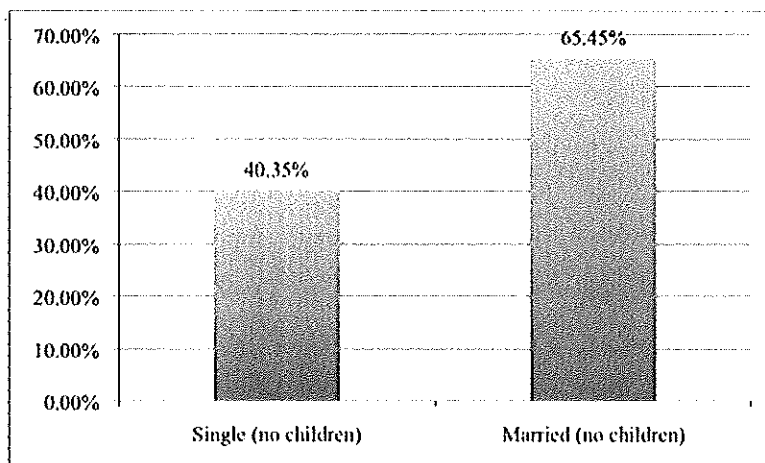
Percentage of workers having no intention to work as industrial workers permanently

C.Differences in responses

between Single (no children) and Married (no children) groups

C13. Willingness to stay

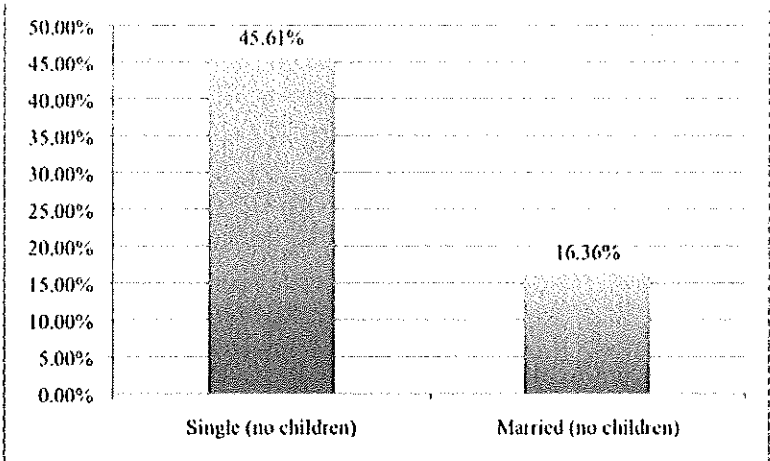
65.45% of married respondents said “they want to stay as long as they can”, versus 40.35% of single respondents.



Percentage of workers wanting to “stay as long as they can”

C15. Living period in this district/ward

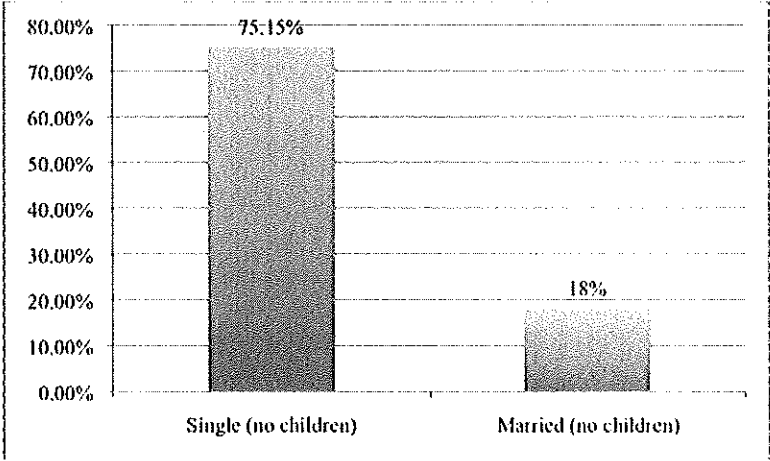
45.61% of single respondents have stayed 1 year or less in the area, versus 16.36% of married respondents. The assumption is that married workers tend to be more stable in terms of stay.



Percentage of workers who have stayed in the area for 1 year or less

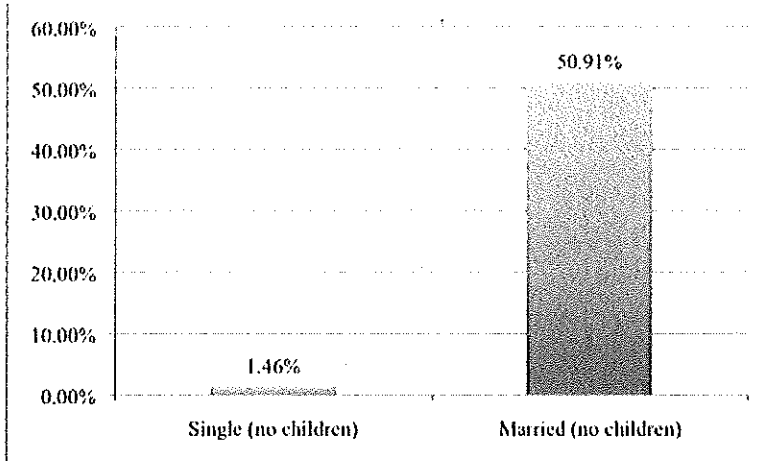
C16. Housing style

75.15% of single respondents share rooms with another, versus 18% of married workers.



Percentage of workers who share rooms with others

50.91% of married workers hire rooms to stay with family, versus 1.46% of singles (who understand family as to stay with brothers/sisters/relatives)

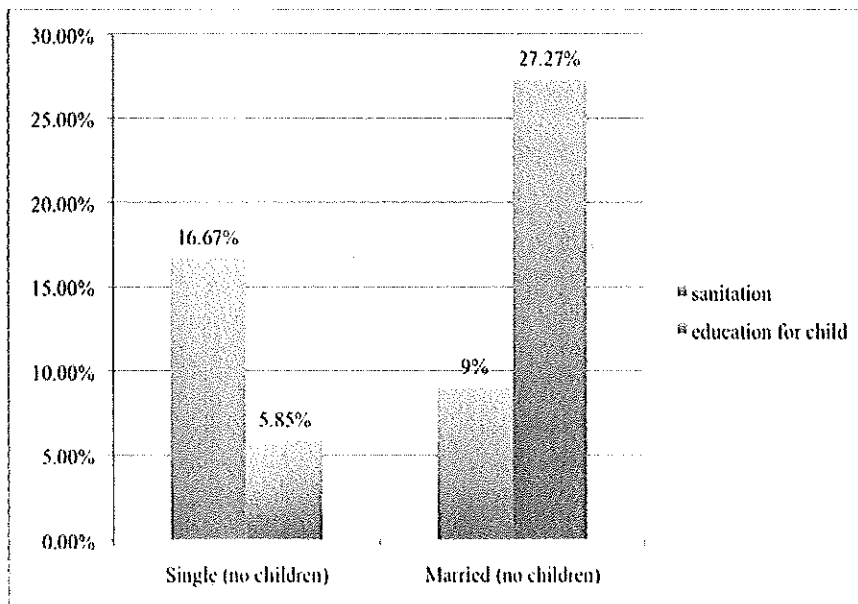


Percentage of workers who hired rooms to stay with families/ relatives

C20. Most insufficient living condition

16.67% of single respondents complained of sanitation, versus 9% of married respondents. The assumption is that married respondents have better sanitation condition.

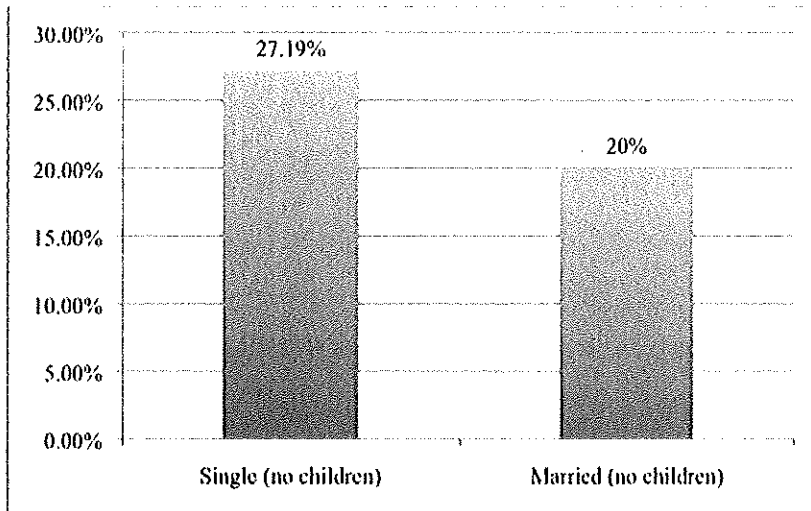
27.27% of married respondents complained of “education for child”, versus 5.85% of single respondents.



Percentage of workers who complained of sanitation and “education for child”

C26. Reason to work in factory

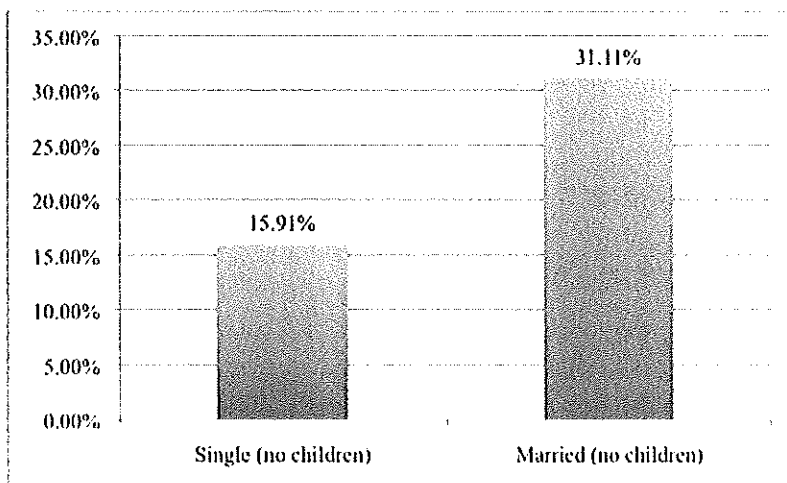
Single respondents (27.19%) appreciated “working environment” than married respondents (20%).



Percentage of workers who choose to work because of “working environment”.

C29. Desirable career path for female workers

Female married workers (31.11%) appreciated Reinstatement after childcare more than female singles (15.91%).



Percentage of female workers who need reinstatement after childcare

D.Differences in responses

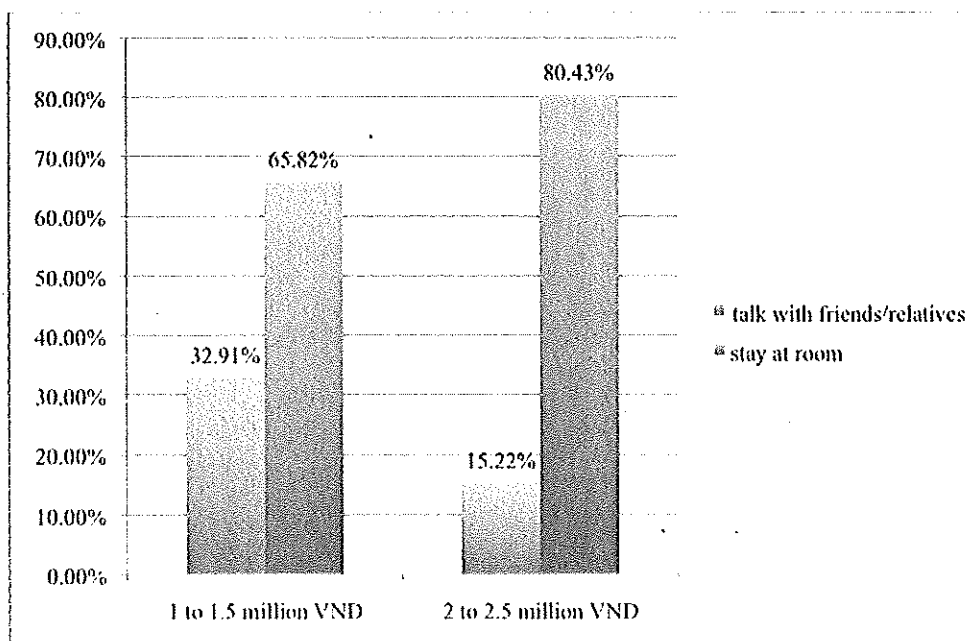
between income groups “1 to 1.5 million VND” and “2 to 2.5 million VND”

D10. Activities during off-time

Workers of less income group tend to “talk with friends/relatives” more than workers with higher income (32.91% versus 15.22%).

Workers of less income group tend to “stay at room” less than workers with higher income (65.82% versus 80.43%).

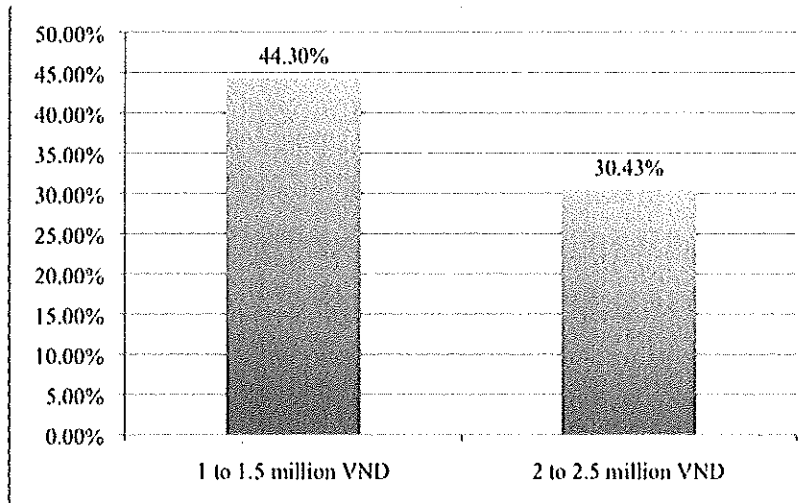
The assumption is that workers with higher income have better “spiritual life” and “in-house” facilities than workers with lesser income.



Percentage of activities conducted by workers in off-time

D15. Living period in this district/ward

44.30% of less income workers said they have stayed in the area for 1 year or less, versus 30.43% of higher income workers.



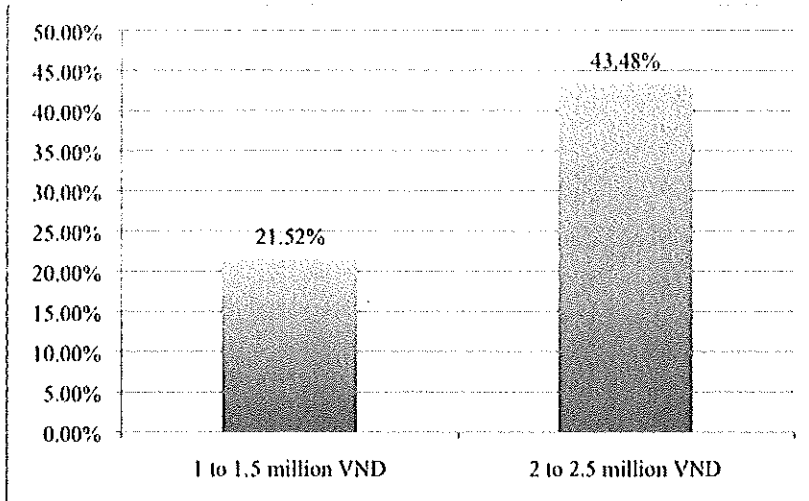
Percentage of workers who have lived in the area for 1 year or less

The assumption is longer staying workers earn more than new comers.

D20. Most insufficient living condition

21.52% of less income workers complained of “security”, versus 43.48% of higher income workers.

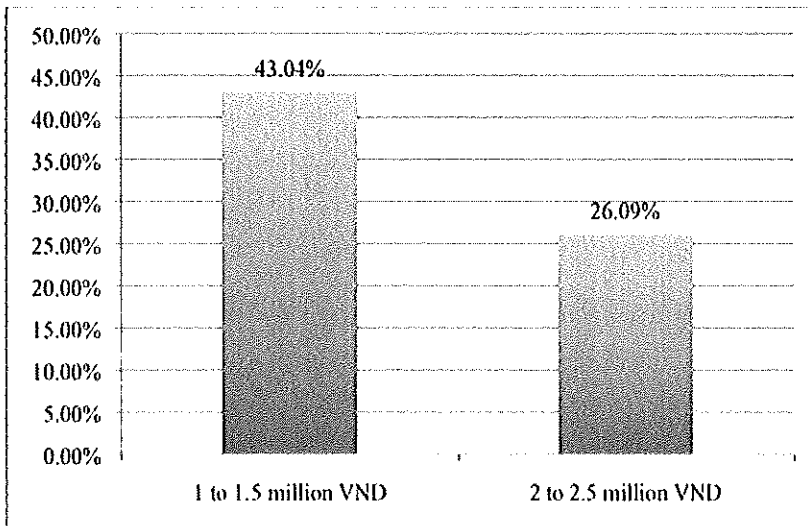
The assumption might be (1) the expectation of higher income workers is more and/or (2) higher income workers are more likely target of theft/insufficient security.



Percentage of workers who complained of "security"

D24. Working period in industrial park

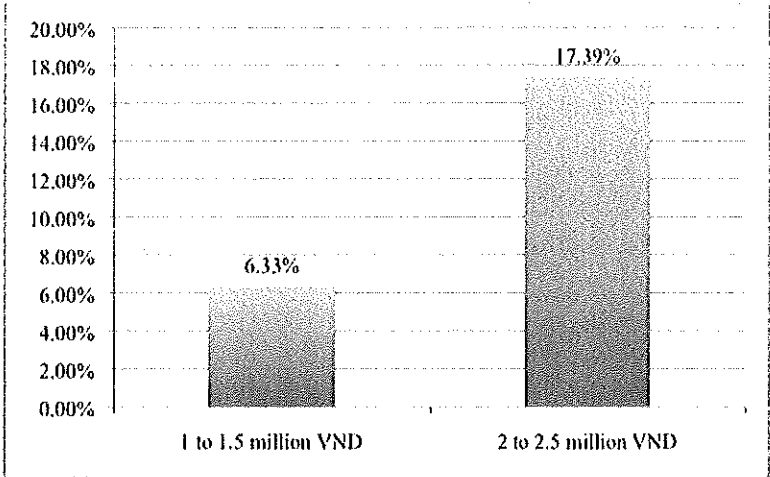
43.04% of less income workers said they have worked in the area for 1 year or less, versus 26.09% of higher income workers.



Percentage of workers who have worked in industrial parks for 1 year or less

D26. Reason to work in factory

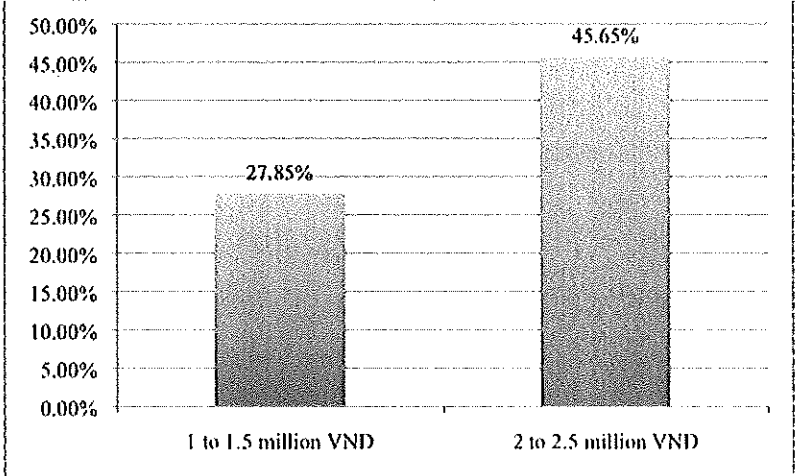
6.33% of less income workers said, they work because "high/stable salary", versus 17.39% of higher income workers.



Percentage of workers who choose to work because of "high/stable salary"

D28. Desirable career path

27.85% of less income workers said they have no intention to be permanent industrial workers, versus 45.65%. The assumption is that higher income workers have more demand and expectation for the future.



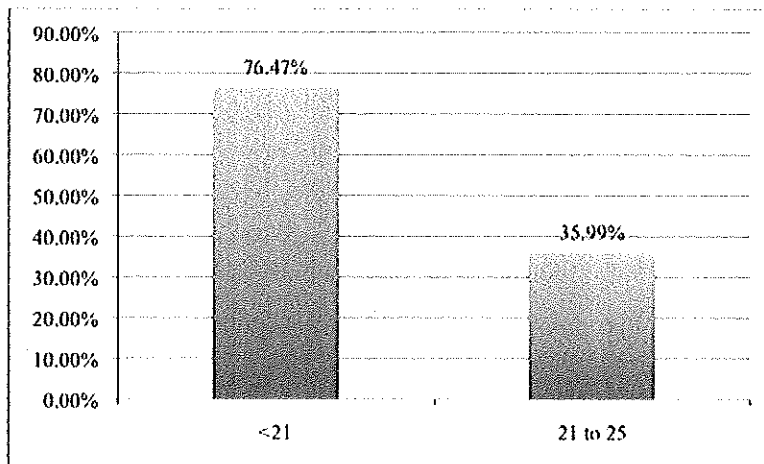
Percentage of workers who have no intention to be permanent industrial workers

E.Differences in responses

between age group “<21” and “21 to 25”

E15. Living period in this district/ward

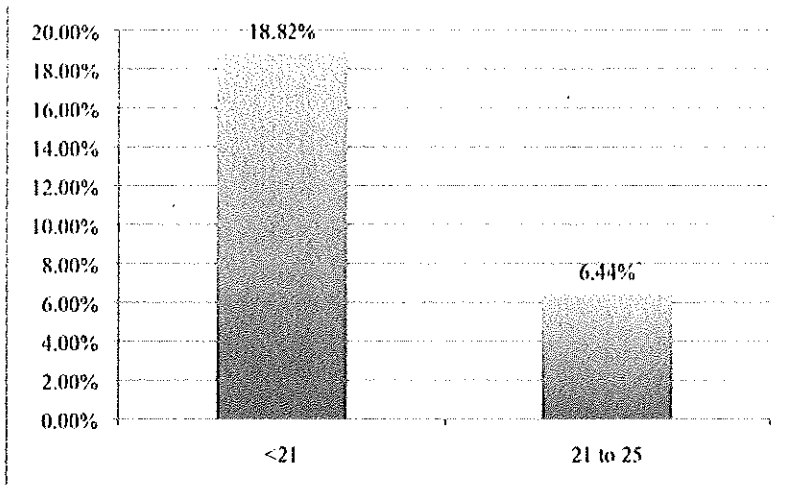
76.47% of “under 21” have lived in the area for 1 year or less, versus 35.99% of “21 to 25”.



Percentage of workers who have lived in the area for 1 year or less

E16. Housing style

18.82% of “under 21” said they live in companies’ dormitory, versus 6.44% of “21 to 25”. The assumption is that younger workers may choose to live in companies’ dormitory first, then they may move to rental house/room.

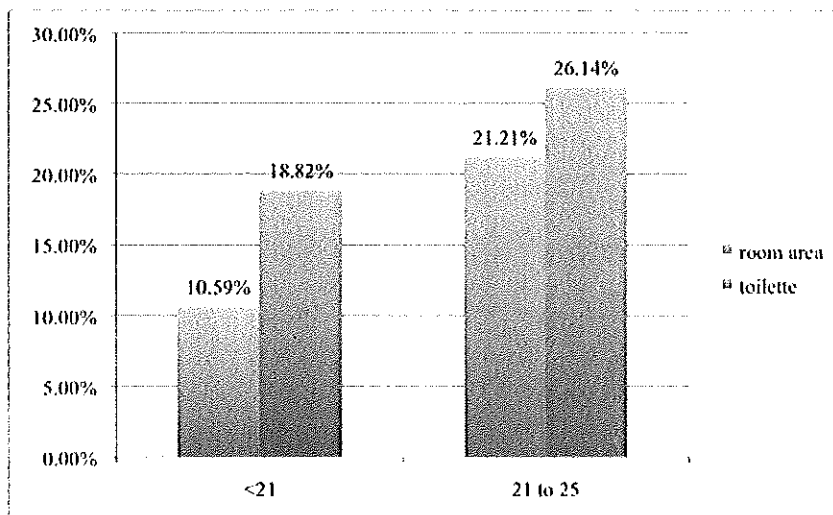


Percentage of workers who live in companies' dormitories

E19. Most insufficient housing condition

10.59% of “under 21” complained of “room area”, versus 21.21% of “21 to 25”.

18.82% of “under 21” complained of toilette, versus 26.14% of “21 to 25”.

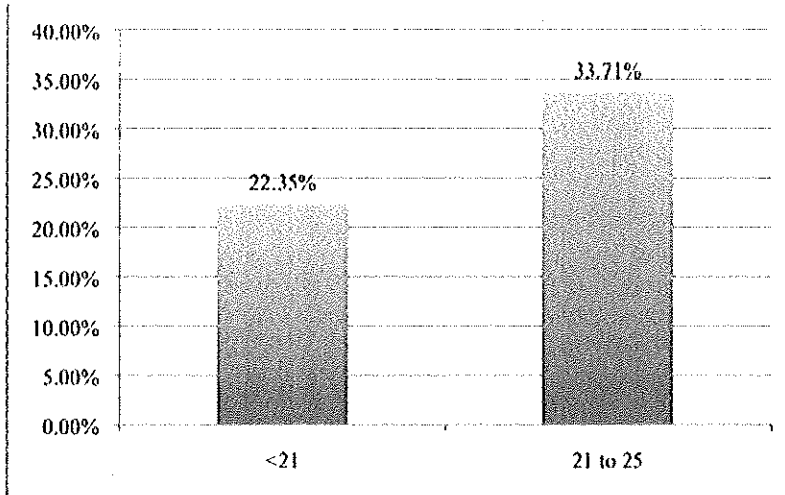


Percentage of workers who complained of “room area” and “toilette”

The assumption is that younger workers have less demand and expectation in “room area” and “toilette” than elder workers.

E20. Most insufficient living condition

22.35% of “under 21” complained of Security, versus 33.71% of “21 to 25”.



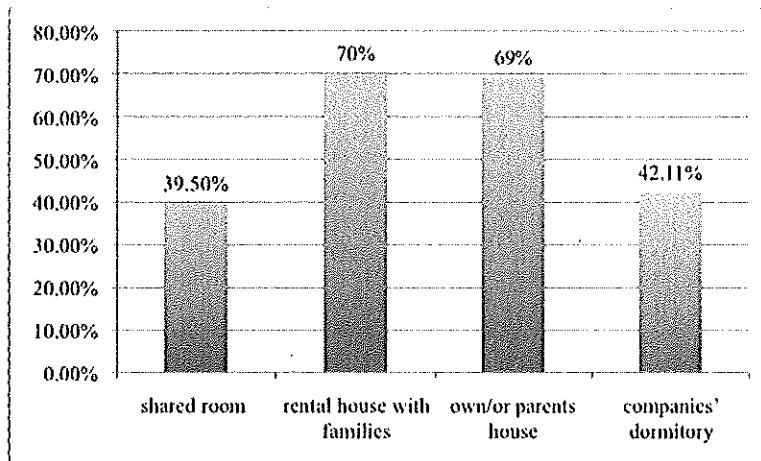
Percentage of workers who complained of “security”

F.Differences in responses

between groups of different housing styles

F13. Willingness to stay

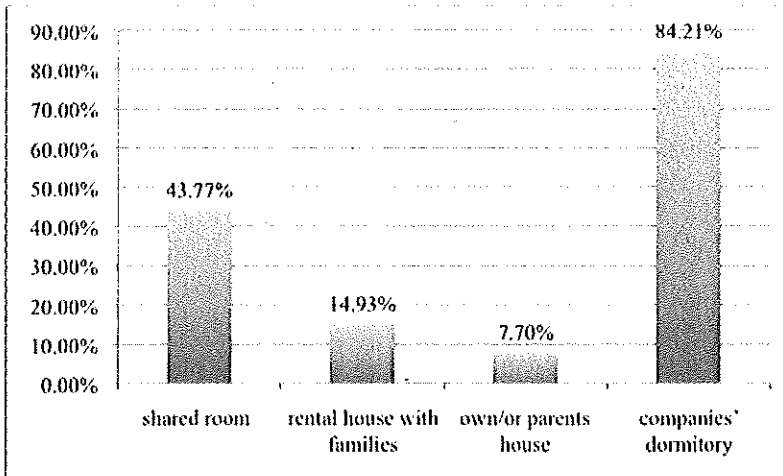
Workers staying in rental house with families (70%) and with own/or parents house (69%) express the willingness “to stay as long as I can” more than workers staying in shared room (39.50%) or companies’ dormitory (42.11%).



Percentage of workers wanting to stay “as long as they can”

F15. Living period in the area

84.21% of workers living in companies’ dormitory said they have lived in the area for 1 year or less, compared with 43.77% of “sharing room” workers, 14.93% of “rental house with family” workers and 7.7% of own/parents house.



Percentage of workers who have lived in the area for 1 year or less

The assumption is that workers prefer to live in companies' dormitory in the first year they come to the area, then they tend to move to rental house/ rooms.

F19. Most insufficient housing condition

78.26% of workers living in companies' dormitory complained about "privacy", compared with 7.69% of those living in own/ parents house, 8.96% of those living in "rental house with family" and 10.68% of those living in rental house.

The assumption is that the strict regulation of companies' dormitory is not perceived well by workers.

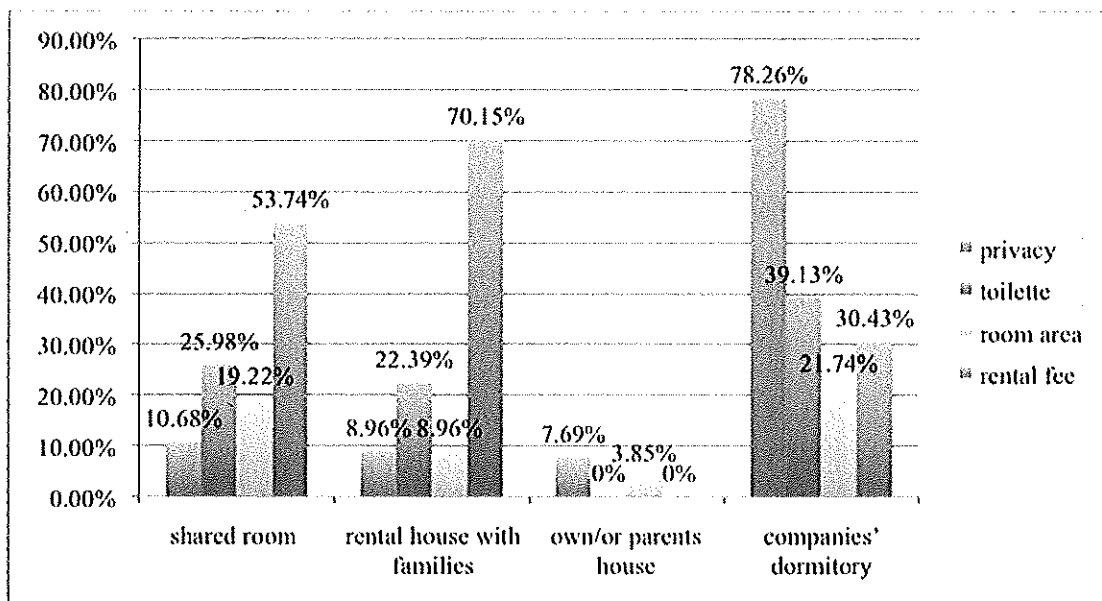
Furthermore, 39.13% of "companies dormitory" workers complained of toilette, compared to 0% of workers with own/parents house, 22.39% of workers staying in rental room with families and 25.98% of those staying in rental rooms.

The assumption is that toilette facilities in dormitories are overload and of insufficient quality for workers.

Of "room area", 21.74% of "dormitories" workers complained, compared with 3.85% of workers with own/parents house, 8.96% of those living in rental room with families and 19.22% of workers living in rental rooms without families.

Of “rental fee”, workers in rental room with families complained most (70.15%), followed by workers in rental rooms without families (53.74%), dormitories workers (30.43%).

We can observe that while workers living in rental house (with and without families) complained most for Rental fee, workers in companies’ dormitory complained most for lack of privacy.

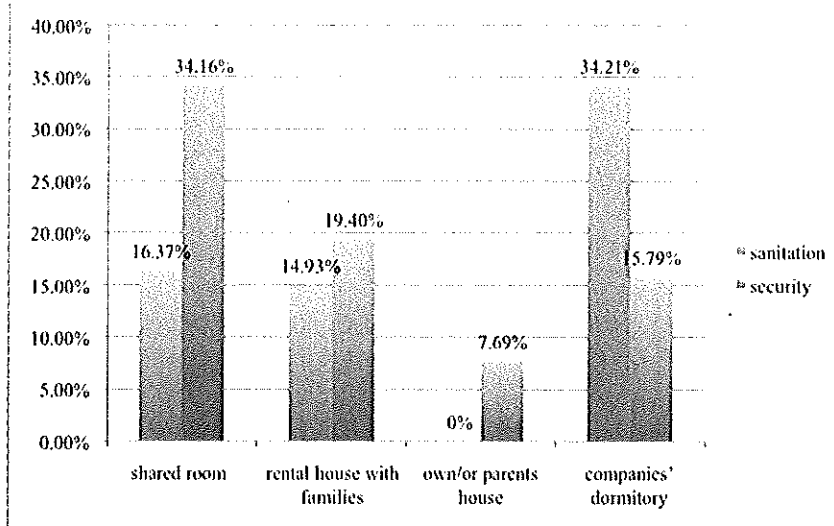


Percentage of workers who complained of “privacy”, “toilette”, “room area” and “rental fee”

F20. Most insufficient living condition

34.21% of “dormitories workers” complained of sanitation, compared with 0% of workers with own/parents house, 14.93% of workers in rental house with families and 16.37% of workers in rental rooms without families.

34.16% of workers in rental rooms without families complained of security, compared with 19.40% of workers in rental rooms with families, 7.69% of workers with own/parents house and 15.79% of companies dormitory workers, indicating that living in companies dormitories does not necessarily mean “absolute safety”.

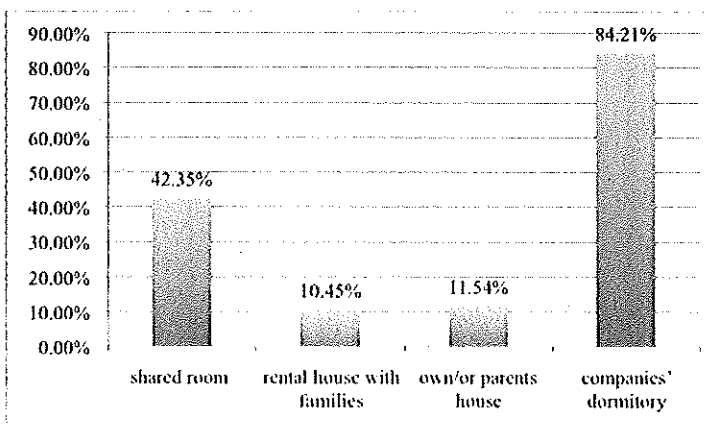


Percentage of workers who complained of "sanitation" and "security"

Indeed we were told by workers that theft has occurred frequently in rental rooms and even in dormitory rooms, among workers with each other.

F24. Working period in industrial park

84.21% of companies dormitory workers said they have stayed in the area for 1 year or less, compared with 11.54% of those living in own/parents house, 10.45% of those staying with family in rental house and 42.35% of workers living in rental rooms without family.



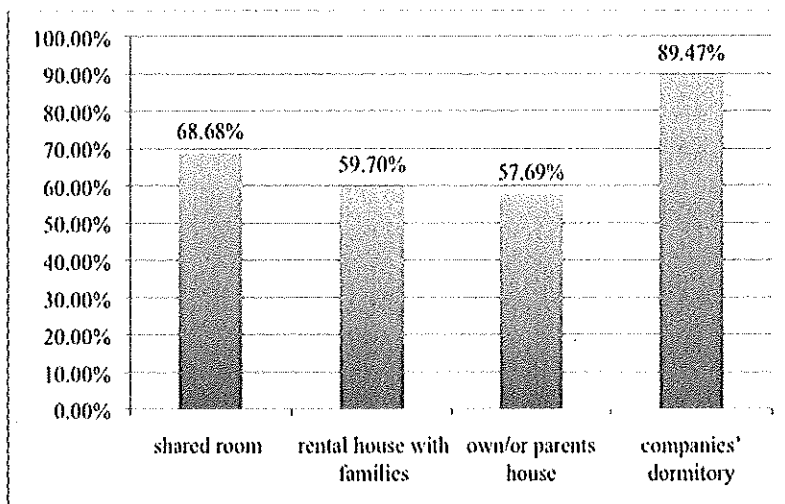
Percentage of workers who have worked in industrial parks for 1 year or less

Again it supports the assumption that workers tend to stay in companies' dormitory

when they first come to the area, then they tend to move to independent housing.

F25. Experience on job changing

89.47% of companies' dormitory workers said they have never change job, up to now, compared with 57.69% of workers with own/parents house, 59.70% of workers living in rental rooms with families and 68.68% of workers living in rental rooms without families.



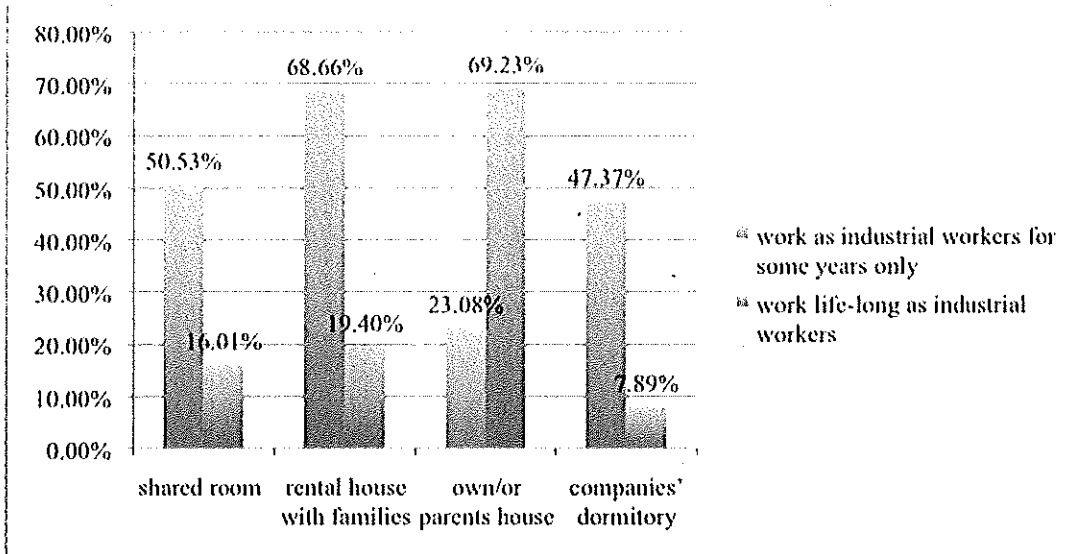
Percentage of workers who have yet to change job

It again indicates that dormitories of companies help workers during the first period they came to the area. Then they might change job or change housing style.

E27. Willingness to work as industrial workers

47.37% of dormitories workers, 68.66% of workers in rental rooms with families and 50.53% of workers in rental house without families said they want to work as industrial workers for some years only, compared with 23.08% of workers with own/parents house.

In particular, 69.23% of workers of own/parents house said they plan to work life-long as industrial workers, compared with 7.89% of dormitories workers, 19.40% of workers in rental house with families and 16.01% of workers in rental rooms without families.



Percentage of workers who want to work "for some years only" and "life-long" as Industrial workers

E28. Desirable career path

No significant difference exists between 4 groups, 60 to 70% of respondents in each group said, they want to work for one company and get promotion.