

Supplemental data

Annex 1. General information of the factories which have partial and total response to the project (18 in 30 selected factories)

Factory	type	No.of workers	Employment
1. Siam Wood	rubber wood furnitures	~500	daily wage two round per day
Note: most are female; 80% muslim			
2. Chotivat	frozen sea food	~800	daily wage two round per day
Note: most are female			
3. Star Con	concrete block	~100	daily wage one round per day monthly wage
Note: Male > female			
4. Tropical	canning seafood	~3,000	daily wage three round per day
Note: 80% are female			
5. Man A Frozen	frozen sea food	-	-
Note: new factory is in process of construction			
6. Songkla marine	animal food	~150	four round per day
Note: most are female			
7. C.M.B. Packaging	tin can	~70	daily wage monthly wage
Note: Male ~ female			
8. C.P.	animal food	~300	daily wage three round per day monthly wage
Note: most are male			
9. Thaisan rubber	rubber product	~300	daily work monthly wage
Note: 70% are female			

Factory	type	No.of workers	Employment
10.King Fisher	canning seafood	~700	daily wage monthly wage
Note: most are female and Muslim			
11.Plapon Karntaksin	animal food	~100	daily wage
12. Yangthai	rubber product	~200	daily wage
13.Thaworn Rubber	rubber product	~300	daily work monthly wage
14.Sritrang Anglo	rubber product	~200	daily wage two round per day monthly wage
Note: most are female			

Remarks: another 4 factories which have initial positive response do not take in the approval of the executive board to join the project.

Annex 2. The opinions of the local policies makers for the possible activities that will be suited with their factories (14 in 18 positive response factory), and the obstacles

Factory	Possible activities	Obstacles
1. Siam Wood	* large group education 15-30 minute in the morning before work * small group education * individual counselling	* most workers are Muslim, the topics related to birth control should be careful
2. Chotivat	* small group education * audio-visual * exhibition board * individual counselling	* have not enough time for group education; but can be done in Saturday * poor educated workers
3. Star Con	* audio-visual * internal broadcasting * group education	* the policy did not point to the laborer, but the officers

Factory	Possible activities	Obstacles
4. Tropical	* various media; audio-visual, poster, exhibition, internal broadcasting etc.	* time constraint
5. Man A Frozen	* small group education * various media	* can be done only short period
Note: the factory is in the process of construction		
6. Songkla marine	* group education * intensive training for AIDS	* no space for teaching
7. C.M.B. Packaging	* various media * group education * individual counselling	* time constraint and have many round of work
8. C.P.	* various media * group education	* local administrators pay less attention about AIDS and STDs * local administrators were afraid of the decreasing of product * the laborers work so tired, the local administrators should give them other recreations
9. Thaisan rubber	* audio-visual	* poor educated workers usually may not interested
10. King Fisher	* various media * additional topics of the sexual problems	* time constraint * most workers are Muslim, the topics related to birth control should be careful
11. Plapon Karntaksin	* audio-visual * other media	* time constraint * Video is convenient in night time * poor educated workers usually may not interested

Factory	Possible activities	Obstacles
12. Yangthai	* various media * group education * individual counselling	* there have some gaps between the administrators and the workers * the owners are Chinese and pay no attention about quality of life
13. Thaworn Rubber	* more interested in family planning	* AIDS is not urgent problem
14. Sritrang Anglo	* more interested in family planning	* time constraint

Annex 3 The opinions of peer counsellors to the obstacle of the interventions

By interview, the peer counsellors give additional opinions to the obstacles and some suggestions of the intervention in the factories as the followings:

1. There were many problems related to adolescent education in the factories, not only HIV infection but also the other Sexually Transmitted Diseases, contraceptive methods, unplanned pregnancy, pre-marital sex etc.
2. The interventions should be sharpened and implemented for each factory independently, because the problems or related issues were different among various factories.
3. The owners or the local administrators play the important roles in promote or retard the intervention programs, the clarification of the programs with the owners or the local administrators was necessary.
4. Most of the workers were low educated group, the educative models should be modified and suited with them.
5. The peer counsellors themselves have low confidence to conduct the individual counselling and education.
6. The peer counsellors were failed in fear that they could not make positive favors among the workers.
7. The interventions should be corresponded with the administration or activities of each factory.
8. They believed that the various programs of the adolescent education will improve the quality of life among the workers, because most of the workers were in adolescent period and lacked the fundamental knowledge about the related problems.
9. The workers were so fatigue during or after work, they have poor concentration about the interventions.
10. The peer workers prefer to have the doctors to give the education programs, because in Thai society the people trusted the doctors more than nurses, health educators or the peer counsellors.
11. They proposed that the education about sex or related matters will be helpful and

supply to the need of the workers.

12. The Muslim workers had no aware about the family planning or the related issues with sex, they could not accept due to it was against with the beliefs of their religion.
13. The announcement for making known in publicity will be of assistance in the concern about the interventions.
14. The worker had time limit for the educative interventions.

Annex 4 The desirable for the adolescent counselling clinic in Songklanagarind hospital (university hospital)

level of concern	before intervention N=308	after intererntion N=226	P value
interested	266 (86.4)	214 (94.7)	S
not interested	12 (3.9)	3 (1.3)	NS
not sure	30 (9.7)	9 (4.0)	S

The level of concern increased significantly after the intervention, and the proportion of not sure had significant change in the positive way.

Annex 5 The knowledge about contraceptive methods among the workers before and after contraceptive education

items	baseline No. (%)	follow-up No. (%)	P value
exhibition group			
condom	53/167 (31.7)	73/131 (55.7)	S
combined pills	53/124 (42.7)	53/130 (40.8)	NS
DMPA	33/165 (20.0)	30/126 (23.8)	NS
IUD	17/160 (10.6)	19/129 (14.7)	NS
safety period	38/157 (24.2)	51/126 (40.5)	S
tubal sterilization	27/157 (17.2)	35/125 (28.0)	S
Norplant	12/162 (7.4)	12/126 (9.5)	NS
group education			
condom	84/143 (58.7)	70/103 (68.0)	NS
combined pills	71/142 (50.0)	64/103 (62.1)	NS
DMPA	55/143 (38.5)	40/101 (39.6)	NS
IUD	29/140 (20.7)	23/101 (22.8)	NS
safety period	27/135 (20.0)	24/100 (24.0)	NS
tubal sterilization	62/139 (44.6)	48/102 (47.1)	NS
Norplant	15/137 (10.9)	16/100 (16.0)	NS

Note: exhibition group; baseline N=174, follow-up N=135
group education; baseline N=154, follow-up N=106

Annex 6 Comparative the knowledge about contraceptive methods between the exhibition group and group education after education

items	exhibition group	group education	P value
	N=135 No. (%)	N=106 No. (%)	
condom	73/131 (55.7)	70/103 (68.0)	NS
combined pills	53/130 (40.8)	64/103 (62.1)	S
DMPA	30/126 (23.8)	40/101 (39.6)	S
IUD	19/129 (14.7)	23/101 (22.8)	NS
safety period	51/126 (40.5)	24/100 (24.0)	S
tubal sterilization	35/125 (28.0)	48/102 (47.1)	S
Norplant	12/126 (9.5)	16/100 (16.0)	NS

Annex 7 The miscellaneous opinions among the workers

items	Number (%)
opinions to unplanned pregnancy	N=310
marry immediately	76 (24.5)
illegal abortion	11 (3.5)
consult their parents	142 (45.8)
consult the doctors	79 (25.4)
attempted abortion by drug from drug store	2 (0.6)
opinion to male who have pre-marital sex	N=295
agree	85 (28.8)
not agree	154 (52.2)
not sure	56 (19.0)
opinions to female who have pre-marital sex	N=295
agree	19 (6.4)
not agree	234 (79.3)
not sure	42 (14.2)
opinion to condom use when have sex	N=124
not use	12 (9.7)
use sometime	16 (12.9)
use anytime	96 (77.4)

Annex 8 The willing behavior of contraceptive choice among the workers

Methods	Number (%)
	N=423
none	22 (5.2)
condom sometime	18 (4.2)
condom anytime	131 (30.9)
coitus interruptus	24 (5.6)
pills	148 (34.9)
safety period	21 (4.9)
other	21 (4.9)
not specify	38 (8.9)

Annex 9 Knowledge participation of educative intervention of the project

level of participation	Number (%)
	N=1,246
no participation at all	4 (0.3)
attend exhibition	315 (25.2)
attend group education	121 (9.7)
attend the intensive course	18 (1.4)
receive verbally from the peer counsellor	229 (18.3)
receive from flapped chart (from peer)	257 (20.6)
receive from various media from the project team	302 (24.2)

Annex 10 The opinions to benefit of this project among exhibition group

items (N=180)	agree	not agree	not sure
1. to be necessary to produce this project to the factories	177 (98.3)	1 (0.5)	2 (1.1)
2. to notify that the workers discussion together about AIDS	152 (84.4)	12 (6.6)	16 (8.8)
3. yourself begin to discuss about AIDS with your friend or relatives	151 (83.8)	20 (11.1)	9 (5.0)
4. after this project you yourself entrusted to take part in AIDS prevention program	144 (80.0)	17 (9.4)	19 (10.5)
5. you yourself play role in distribution the knowledge about AIDS to your friends or relatives	142 (78.8)	26 (14.4)	12 (6.6)
6. you express willingness to use condom when have sex with prostitutes or not well-known partners	176 (97.7)	3 (1.6)	1 (0.5)
7. If you are not confident that you or your sexual partners have AIDS or STDs, you will use the condom	138 (76.6)	25 (13.8)	16 (8.8)
8. the pictures of full blown AIDS look terrible, so should not disclose to the publics	18 (10.0)	159 (88.3)	3 (1.6)

Annex 11 The opinions to benefit of this project among group education

items (N=164)	agree	not agree	not sure
1. to be necessary to produce this project to the factories	152 (92.6)	6 (3.6)	6 (3.6)
2. to notify that the workers discussion together about AIDS	142 (86.5)	11 (6.7)	10 (6.0)
3. yourself begin to discuss about AIDS with your friend or relatives	120 (73.1)	29 (17.6)	14 (8.5)
4. after this project you yourself entrusted to take part in AIDS prevention program	114 (69.5)	15 (9.1)	34 (20.7)
5. you yourself play role in distribution the knowledge about AIDS to your friends or relatives	116 (70.7)	21 (12.8)	26 (15.8)
6. you express willingness to use condom when have sex with prostitutes or not well-known partners	141 (85.9)	8 (4.8)	14 (8.5)
7. If you are not confident that you or your sexual partners have AIDS or STDs, you will use the condom	96 (58.5)	56 (34.1)	11 (6.7)
8. the pictures of full blown AIDS look terrible, so should not disclose to the publics	35 (21.3)	119 (72.5)	9 (5.4)

Annex 12 The opinions of the workers to possible intervention that suit with the factory

items	Number (%) N=1,090
1. exhibitions include posters	213 (19.5)
2. pamphlet, booklet, and other printed materials	218 (20.0)
3. Audio-visual, video tape	225 (20.6)
4. group education by educators	188 (17.2)
5. group education by peer	74 (6.7)
6. representatives from each factory to have intensive course training, and to be peer counsellors for the workers	172 (15.7)