

THAILAND

The Foundation of Thailand Productivity Institute (FTPI)
in collaboration with the World Bank

PRODUCTIVITY AND INVESTMENT CLIMATE STUDY THAILAND (PICS-2004)

Manufacturing Sector Survey Questionnaire

Part I

(To be administered to Chief Executive Officers (CEO), general managers or business owners)

About the survey

The Foundation for the Thailand Productivity Institute (FTPI) has been given the responsibility to conduct a productivity and Investment Climate Survey (PICS) with the assistance of the World Bank. This work is conducted under the supervision of the National Economic and Social Development Board (NESDB), and its results will support Thailand's initiative to improve productivity and competitiveness of firms operating in Thailand.

The Productivity and Investment Climate Survey is a collaborative effort of the Thailand Government and the World Bank. Similar surveys are being carried out in several other countries. Parts of the survey questionnaire can be filled out by your staff working from your records; other parts should be answered by the owner or plant manager. A team of enumerators will visit your plant to go through the questionnaire with you or your staff. **Only aggregate or average information from a large sample of firms will be published and we guarantee confidentiality for all individual responses.**

The general purpose of the survey is to understand the investment climate in Thailand and how it affects business performance, with the objective to improve it. We will provide you with a summary report that will be directly useful to you in that it will enable you to benchmark your business and your industry against domestic and international competitors. The survey will also provide useful information about the investment climate in Thailand in the international context. The World Bank's experience in a wide range of countries shows that this information can be crucial for improving the investment climate so that businesses and workers can prosper.

The questionnaire begins with items about the origin and shareholding status of a business, including questions about the background of the owner or manager. This information is useful to determine if and how the interaction between investment climate and business performance varies by business types (foreign versus domestic, or new versus experienced). It then proceeds to issues of finance (to examine financial constraints on business and expansion), technology (to assess the ease of access to new technologies), relationship with other firms (to gauge the importance of associations and networks), government regulation, contract enforcement, labor relations and international trade. What will eventually emerge is a comprehensive picture of the environment in which businesses are operating in Thailand, both their strengths and weaknesses.

To Enumerators

For precision of statements, the acronym "KE"- for a fictional business, Khon-Kaen Electronics-appears in places where the name of the participating business should be. Similarly "Electronics" appears where the sector of activity of the business should be.

ESTABLISHMENT NAME:

ESTABLISHMENT NO. _____ id_pics

Address:

ISIC Code: _____ isic

INDUSTRY CODE _____ items
subitems

1. Food Processing
 - 1.1 Canned Food
 - 1.2 Frozen Food
 - 1.3 Sugar
2. Textile
 - 2.1 Yarn
 - 2.2 Clothes
3. Clothing
 - 3.1 Clothing for men, women and child
4. Automotive Parts
 - 4.1 Automotive parts
5. Electronics & Electrical Appliances
 - 5.1 Electronics Products
 - 5.2 Electronics Parts
 - 5.3 Household Electrical Appliances

6. Rubber and Plastics
 - 6.1 Plastic Packaging
 - 6.2 Household Plastic Products
 - 6.3 Rubber
7. Wood products and Furniture
 - 7.1 Wood Furniture
8. Machinery and Equipment
 - 8.1 Machinery

REGION CODE _____ code_fac

1. North
2. Central
3. Bangkok and Vicinity
4. East

5. Northeast
6. South

Province: province_code

City Codes:

City Name:

Name of Enumerator:

Name of Respondance:

Current Position:

Phone number:

Interview Date:

Start Time:

Finish time:

Email:

Fax Number:

Enumeration validated by (Inspector):

Date/Time:

SECTION I GENERAL INFORMATION

I.1. In what year did [KE] start its operations in this country?

i1_m month i1_y year

I.2. How many full time employees did [KE] have when it started operations? i2 (number)

I.3. How many full time employees does [KE] have now (at the time of this interview)? i3 (number)

I.4. What percentage of your firm is owned by:

- | | | | |
|--------------------|------------------|---------|-------|
| 1. Private sector: | a) domestic..... | _____ % | i4_1a |
| | b) foreign | _____ % | i4_1b |
| 2. Government | | _____ % | i4_2 |

TOTAL 100 %

I.5. What fraction of the sales of [KE] are to the government or to state-owned enterprises? _____ % i5

I.6. What is the current legal status of [KE]? _____ i6

1. Individual proprietorship
2. Partnership
3. Private limited Company
4. Public Limited Company
5. Public corporation
6. Cooperative
7. Others (Specify) i6_1

I.7. How many plants/factories are under [KE]' s control? _____ (number) i7

[A plant or factory is defined as a manufacturing facility that is geographically distinct from other facilities. A production line does not, by itself constitute a plant or factory.]

I.7.a. How many are located:

1. In this city or town: _____ (number) i7_a1
2. In this province _____ (number) i7_a2
3. In this Region: _____ (number) i7_a3
4. In this country _____ (number) i7_a4
5. In other countries: _____ (number) i7_a5

I.7.b. How many are in this industry? _____ (number) i7_b

I.7.c. How many are in Business Services (IT, Communication, Advertising, Transports Logistics)
_____ (number) i7_c

I.8. Where are your headquarters and your principal operating facility/plant located in this country?

Headquarters _____ (name of city) i8_1

Principal operating facility/plant _____ (name of city) i8_2

I.9. Is your firm a member of a financial group or holding company? _____ i9 Yes=1 No=2

I.10. Is this plant located in a Science park operated by NSTDA? _____ i10 Yes=1 No=2

I.11. Was [KE] listed on the Bangkok Stock Exchange in 2003? _____ i11 Yes =1 No=2

I.12. Did [KE] export any part of its output in 2002-2003? _____ i12 Yes =1 No=2

SECTION II GOVERNANCE AND OWNERSHIP STRUCTURE

A. Information on [Khun Phanom], CEO of [KE]

II.1. Gender of [Khun Phanom] _____ ii1 *Male=1 Female=2*

II.2. How long have you, [Khun Phanom], been working for this firm? _____ years ii2

II.3. What is the highest level of education completed by you [Mr. Mostafa]? _____ ii3

Code:

1= Degree

2= Por Wor Sor

3= Upper secondary / Por Wor Shor

4= Lower secondary

5= Primary

6= None (illiterate)

II.3.a. If you obtained a University degree, in what field is it? ii3_a1

1 = Science & Engineering

2 = Medical science

3 = Economics and Business

4= Other Social Science & Humanity

5 = Others (Please Specify) ii3_a2

II.4. Where were you born? _____ (country)

II.4.a. What is your citizenship? _____ ii4

II.5. How many years of experience in [Electronics] manufacturing did you [Khun Phanom] have before joining [KE]? _____ years ii5

II.6. What is the highest level of education completed by Khun Phanom's father? _____ ii6

Code: 1= Degree

2= Por Wor Sor

3= Upper secondary / Por Wor Shor

4= Lower secondary

5= Primary

6= None (illiterate)

II.7. Approximately in what wealth bracket were your parents? [Khun Phanom's] _____ ii7

Code: 1= High

2= Middle

3= Low

II.8. a. In case that [KE] have a single owner, are you [Khun Phanom], the CEO of [KE], ALSO ITS SOLE OWNER?

_____ ii8_a

1. YesSkip to Section III

2. No.....Skip to question II. 10

b. In case that [KE] have not a single owner, what percentage of your firm is owned by the principal owner?

_____ % ii8_b

II.9. Are you [Khun Phanom] a shareholder of [KE]? ii9

1. YES How big is your [Khun Phanom's] share? _____ % ii9_1

2. NO

II.10. Who is the largest shareholder? _____ ii10

Codes

1. A family member of yours

2. Other individual private investors

3. Local financial institution

4. Local private sector corporation

5. Multi-national companies

_____ →

_____ →

_____ →

_____ →

_____ →

Go to Part B

Go to Part B

Go to Part C

Go to Part C

Go to Part C

Part B. Information on single owner/majority shareholder

- II.11. What is the share owned by the majority shareholder? _____ % ii_11
- II.12. Did the current owner/majority shareholder form [KE]? ii_12
1. Yes (go to question II.13)
 2. No
- II.12.a. How did the current owner/majority shareholder acquire [KE]? _____ ii_12a
- Code: 1= *Bought it*
2= *Inherited it*
3= *Other:* _____ (specify) ii_12a_o
- II.13. Gender of owner/majority shareholder _____ ii_13
- Code: 1= *Male* 2= *Female*
- II.14. What is the highest level of education completed by owner/majority shareholder? _____ ii_14
- Code: 1= *Degree*
2= *Por Wor Sor*
3= *Upper secondary / Por Wor Shor*
4= *Lower secondary*
5= *Primary*
6= *None (illiterate)*
- II.14.a. If he obtained a University degree, in what field is it? ii_14a
- 1 = *Science & Engineering*
 - 2 = *Medical science*
 - 3 = *Economics and Business*
 - 4= *Other Social Science & Humanity*
 - 5 = *Other (Please specify)* ii_14a_o
- II.15. How many years of experience in [Electronics] manufacturing did the owner/majority shareholder have before becoming involved in [KE]? _____ years ii_15
- II.16. Approximately in what wealth bracket were the parents of the owner/majority shareholder? _____ ii_16
- Code: 1= *High*
2= *Middle*
3= *Low*
- II.17. What is the highest level of education completed by the parents of the owner/majority shareholder? _____ ii_17
- Code: 1= *Degree*
2= *Por Wor Sor*
3= *Upper secondary / Por Wor Shor*
4= *Lower secondary*
5= *Primary*
6= *None (illiterate)*
- II.18. Has the father of the owner/majority shareholder been an entrepreneur? _____ Yes=1 No=2 ii_18

Part C. Information on the Parent Company (for subsidiaries/divisions of business groups)

- II.19. Where are the headquarters of the Parent Company of [KE]? _____ ii_19
- Code: 1= *in the same city/town as [KE]*
2= *in another city in this country*
3= *in another country* _____ (name the country) ii_19_o
- II.20. Does [KE] participate in a "liquidity center" managed by [Parent company], i.e., does [KE] pass its excess liquidity to [Parent establishment] or other companies owned by [Parent company]? _____ Yes=1 No=2 ii_20
- II.21. Does [KE] make its own investment decisions or are all investment decisions made by [Parent establishment]? _____ ii_21
- Code: 1= *[KE] makes all its investment decisions independently*
2= *[Parent establishment] makes all investment decisions for [KE]*
3= *Decisions are made jointly.*

**THE REMAINDER OF THE QUESTIONNAIRE SHOULD BE ANSWERED WITH RESPECT TO THIS
ESTABLISHMENT (FACTORY/ PLANT)**

**SECTION III
INVESTMENT, TECHNOLOGY AND INNOVATION**

Part A. Investment and Capacity

III.1. When did you make your most recent purchase of machinery or equipment used in the production process?
_____ iii_1m month _____ iii_1y year

III.1.a. What was of the value of that purchase? _____ Baht iii_1a

III.1.b. How was it financed? *[multiple answers allowed, circle what applies]*

iii_1b1 1. By owner/parent establishment;

iii_1b2 2. Retained earnings;

iii_1b3 3. Bank overdraft;

iii_1b4 4. Bank loan;

iii_1b5 5. Leasing;

iii_1b6 6. Loans from associations (such as informal Rotative Savings and Credit Associations)

iii_1b7 7. Loans from friends/relatives

iii_1b8 8. Other sources (please specify) _____ iii_1b8_o

III.1.c. What percentage of this most recent purchase of machinery or equipment was

iii_1c_a1 a. domestic new machinery or equipment _____% iii_1c_a2

iii_1c_b1 b. domestic second-hand machinery or equipment? _____% iii_1c_b2

iii_1c_c1 c. imported new machinery or equipment? _____% iii_1c_c2

iii_1c_d1 d. imported second-hand machinery or equipment? _____% iii_1c_d2
100%

III.2. If you imported part or all the most recent major purchase of machinery and equipment, what was the rate of import duty paid? _____% (Please put '0' if no import duty was paid) iii_2

III.2.a. Of your outlay on imported machinery or equipment referred before, what share was from

1. Country iii_2a1_1... _____ % iii_2a1_2

2. Country iii_2a2_1... _____ % iii_2a2_2

3. Country iii_2a3_1... _____ % iii_2a3_2

4. Others iii_2a4_1... _____ % iii_2a4_2

Total 100%

III.2.b. For your most recent investment, did you benefit from the following incentives? Yes=1 No=2

1. Imported Tax Reduction _____ iii_2b1

2. Income Tax Reduction _____ iii_2b2

3. Raw Material Tax Reduction _____ iii_2b3

4. Lower Loan Rate _____ iii_2b4

5. Right in access to land for Foreign investor _____ iii_2b5

6. Income Tax Reduction for R&D Expenditures _____ iii_2b6

Other iii_2b7_o (Please specify) iii_2b7

III.3. What percentage of your profits were re-invested in your firm in 2002-2003? _____% iii_3

III.4. Do you expect to make a substantial increase in investment in order to increase capacity or improve quality? iii_4

1. No

2. Firm is closing

3. Yes, expect to invest

..... within 2004, What percentage of your next investment will be IT related ? iii_4.3a

..... between 2004-2006, What percentage of your next investment will be IT related ? iii_4.3b

III.5. Does your firm currently invest outside Thailand? _____ iii_5 Yes=1 No=2 (skip to III.6)

III.5.a. what percentage of your total investment in 2002-2003 was abroad? _____% iii_5a

III.5.b. what percentage of your latest investment abroad went to:

China	_____ %	iii_5b1
Other Asian countries	_____ %	iii_5b2
USA	_____ %	iii_5b3
Europe	_____ %	iii_5b4
Africa	_____ %	iii_5b5
Others	_____ %	iii_5b6
Total	100%	

III.5.c. What are the three most important reasons why you chose to invest abroad?

1st. iii_5c_1
2nd. iii_5c_2
3rd. iii_5c_3

1. In search of cheap labor abroad
2. Higher worker productivity abroad
3. Lower taxes on profits abroad
4. Better infrastructure abroad
5. Larger market for my products abroad
6. High taxes on inputs in Thailand
7. Shortage of unskilled workers in Thailand
8. Shortage of skilled workers in Thailand
9. Others (Specify) _____ iii_5c9_o

III.6. What percentage [of the value] of KE's plant machinery and equipment is of age

1. <5 years old iii_6_1a _____ % How many more years can it be used? iii_6_1b _____ years
 2. 5-10 years old iii_6_2a _____ % How many more years can it be used? iii_6_2b _____ years
 3. 10-20 years old iii_6_3a _____ % How many more years can it be used? _____ years iii_6_3b
 4. >20 years old iii_6_4a _____ % How many more years can it be used? _____ years iii_6_4b
- 100%

III.7. What percentage of your production machines is computer controlled ? (% of the original net value of the fixed assets) _____% iii_7

III.8. {Capacity utilization is the amount of output actually produced relative to the maximum amount that can be produced.} At what capacity did this plant produce...

- a) in 2003 _____ % iii_8a
- b) in 2002 _____ % iii_8b
- c) in 2001 _____ % iii_8c

III.9. If your capacity was not fully utilized in 2003, was it because of : Yes=1 No=2

- | | | |
|--|---------|-------|
| (1) Local raw materials and intermediate inputs shortage | iii_9_1 | _____ |
| (2) Imported raw material and intermediate inputs shortage | iii_9_2 | _____ |
| (3) Lack of working capital | iii_9_3 | _____ |
| (4) Low demand | iii_9_4 | _____ |
| (5) skilled labor Shortage | iii_9_5 | _____ |
| (6) Unskilled labor Shortage | iii_9_6 | _____ |
| (7) Structural Over-capacity | iii_9_7 | _____ |
| (8) Others (please specify) iii_9_8_o | iii_9_8 | _____ |

Part B. NEW PRODUCTS/PROCESSES AND RESEARCH & DEVELOPMENT (R&D)

III.10. How many types of products does your establishment produce? _____(number) iii_10

III.11. How many new products has your establishment introduced in the last three years (2001-2003)? _ (number) iii_11a

If new products, What percent of the plant's sales did the new products account for in 2002-2003? iii_11b

What percent of your exports did the new products account for in 2002-2003? iii_11c

III.12. Did [KE] employ staff exclusively for design/doing innovation/R&D in 2002-2003? iii_12

1. Yes, how many employees? _____(number) iii_12_1

2. No

III.13. Did **[KE]** subcontract R&D projects to other companies or organizations? _____ iii_13 Yes=1 No=2

III.14. How much did your firm spend in royalties in year 2003? _____ iii_14 Baht

III.15. Are you planning to introduce new designs/Products in the next 2 years (2004-2005)? _____ iii_15

Yes=1 No=2

Part C. TECHNOLOGICAL INNOVATION

III.16. Has your company undertaken any of the following initiatives in the last two years (2002-2003) ?

PLEASE ANSWER ALL QUESTIONS

	Undertake	
	Yes	No
1. iii_16_1 Upgraded your machinery and equipment in the last 2 years	1	2
2. iii_16_2 Entered new markets due to process or product improvements in quality or cost	1	2
3. iii_16_3 Filed any patents/utility models or copyright protected materials	1	2
4. iii_16_4 Developed a major new product line	1	2
5. iii_16_5 Upgraded an existing product line	1	2
6. iii_16_6 Introduced new technology that has substantially changed the way the main product is produced	1	2
7. iii_16_7 Discontinued at least one product (not production) line	1	2
8. iii_16_8 Opened a new plant	1	2
9. iii_16_9 Closed at least one existing plant or outlet	1	2
10. iii_16_10 Entered a new joint venture agreement with a foreign partner	1	2
11. iii_16_11 Obtained a new licensing agreement	1	2
12. iii_16_12 Outsourced a major production activity that was previously conducted in-house	1	2
13. iii_16_13 Brought in-house a major production activity that was previously outsourced	1	2

IF ANSWER IS ALL 'NO' GO TO III.27

III.17. Generally, what are the leading ways in which your establishment acquires technological innovations? Please rank the most three important ways and specify the percentage of total innovations that you acquire from each way.

1st. iii_17_1
2nd. iii_17_2
3rd. iii_17_3

1) Embodied in new local machinery or equipment	% of total innovations	iii_17_1pct
2) Embodied in new Imported machinery or equipment	% of total innovations	iii_17_2pct
3) By hiring key personnel	% of total innovations	iii_17_3pct
4) Licensing or turnkey operations from international sources	% of total innovations	iii_17_4pct
5) Licensing or turnkey operations from domestic sources	% of total innovations	iii_17_5pct
6) Developed or adapted within the establishment locally	% of total innovation	iii_17_6pct
7) Transferred from parent company	% of total innovations	iii_17_7pct
8) Developed in cooperation with client firms	% of total innovations	iii_17_8pct
9) Developed with equipment or machinery supplier	% of total innovations	iii_17_9pct
10) From a business or industry association	% of total innovations	iii_17_10pct
11) Consultants	% of total innovations	iii_17_11pct
12) From universities, public institutions	% of total innovations	iii_17_12pct
13) Mergers and acquisitions	% of total innovations	iii_17_13pct
Other (please specify: iii_17_14_o _____)	% of total innovations	iii_17_14pct

III.18. If technological innovations were developed or adapted locally, did you seek help/collaboration with:

Yes=1 No=2

1. other firms	_____	iii_18_1
2. Universities	_____	iii_18_2
3. Research institutions	_____	iii_18_3
4. Use any government incentives	_____	iii_18_4
Other (Specify).....iii_18_5_o _____	_____	iii_18_5

III.19. If technology transferred from parent establishment, were the following necessary

Yes=1 No=2

1. adaptation or R&D to suit local conditions	_____	iii_19_1
2. training of workforce to implement technology	_____	iii_19_2

III.20. Is your firm a supplier to a Multi-National Corporation (MNC)? iii_20

If your firm is a supplier to a MNC, did you learn any new technology from that MNC?

1. Yes 2. No (Skip to III.21) iii_20a

III.20.a Was it explicitly via MNC licensing, training, quality certification programs? Yes=1 No=2 iii_20b

III.21. Have you received any Government incentives to conduct technological innovation and R&D? iii_21

III.22. Please give your assessment of the following Schemes:

	Have you benefited from this specific scheme? 1=Yes 2=No, I Never heard about this scheme 3. No, I applied and was turned down 4. No, I never applied because process too long and complicated 5. Never applied for other reasons.	If yes, When did you get this benefit? (Year)	How critical was this to your firm? 0= no value 1= minor value 2= moderate value 3= major value 4= critical value to your firm	What is the single most important problem with this scheme?
Science Park Project	iii_22_sc1	iii_22_sc2	iii_22_sc3	iii_22_sc4
Low-interest loan from NASDA	iii_22_lo1	iii_22_lo2	iii_22_lo3	iii_22_lo4
200% Tax Reduction for R&D Expenditure	iii_22_ta1	iii_22_ta2	iii_22_ta3	iii_22_ta4
Thailand Innovation Project	iii_22_in1	iii_22_in2	iii_22_in3	iii_22_in4
Other (Please Specify) iii_22_o	iii_22_o1	iii_22_o2	iii_22_o3	iii_22_o4

III.23. Have you worked with research/technology support institutions (eg. universities etc) to acquire or upgrade technology in the past three years? _____ iii_23a

1. Yes
2. No (Skip to III.24)

III.23.a. could you please list the three institutions you work with the most?

1. _____ (name of institute) iii_23a_1
2. _____ (name of institute) iii_23a_2
3. _____ (name of institute) iii_23a_3

iii_23.b. Could you rank these three institutions along the listed attributes?

Please rank on a scale of 1-4 with 1 = very poor, 2 = poor, 3 = fairly good, 4 = very good, 5=not applicable

Attributes	Institution 1	Institution 2	Institution 3
Outreach and dissemination of their programs	iii_23b_ou1	iii_23b_ou2	iii_23b_ou3
Ease of application process for support	iii_23b_ea1	iii_23b_ea2	iii_23b_ea3
Transparency of approval/selection process	iii_23b_tr1	iii_23b_tr2	iii_23b_tr3
Relevance/effectiveness of services used:			
i) assistance with search, choice & purchase of new technologies	iii_23b_as1	iii_23b_as2	iii_23b_as3
ii) negotiation on licensing agreements	iii_23b_ne1	iii_23b_ne2	iii_23b_ne3
iii) modifying existing technologies	iii_23b_mo1	iii_23b_mo2	iii_23b_mo3
iv) R&D in breakthrough technologies	iii_23b_rd1	iii_23b_rd2	iii_23b_rd3
Relevance/effectiveness of services used by your firm	iii_23b_re1	iii_23b_re2	iii_23b_re3

III.24. If you have not worked with any research/technology support institutions in the past three years, list down the three most important reasons. 1. _____ 2. _____ 3. _____

1st. iii_24_1
2nd. iii_24_2
3rd. iii_24_3

1. Haven't heard of them
2. Their services are not relevant to your firm's needs
3. Don't know anyone there to make a first point of contact
4. Application process too cumbersome
5. Lack of technical capability in-house to interact with institutions
6. Afraid of in-firm technical knowledge leaking out by collaborating
7. Tried it before and was not a fruitful experience
8. Others (Specify) _____ iii_24_8_o

III.25. If stronger intellectual property rights (IPR) laws such as copyright and patent laws are adopted and enforced, :

1. would your firm undertake more R&D? _____ Yes=1 No=2 iii_25_1
2. Would it make it more costly to acquire new technology? _____ Yes=1 No=2 iii_25_2

III.26. Has your firm received any ISO (e.g. 9000, 9002 or 14,000) certification? _____ 1=Yes 2=No iii_26

III.27. What % of your sales are made exclusively to your clients' unique specification (i.e. you cannot sell to other clients)? _____ % iii_27

III.28. What % of your sales carries a warranty? _____ % iii_28

III.29. Do you have your own brand(s) ? _____ iii_29

1. Yes
2. No (Skip to III.30)

III.29.a. What do you do to market your brand? 1=Yes, 2=No

1. Media advertising iii_29a1 _____
2. Exhibitions iii_29a2 _____
3. Website iii_29a3 _____
4. Do nothing iii_29a4 _____
5. Other iii_29a5 _____ iii_29a5_o

III.30. What are the main constraints to introducing IT, or expanding IT use, in your company? (Please rank the following factors on a scale of 1 to 5, where 1=not important, 3=important, and 5=critically important)

Constraints	Importance				
	1	2	3	4	5
High cost of IT equipment and maintenance iii_30_1					
Lack of knowledgeable and trained IT personnel iii_30_2					
Low returns to investments in IT iii_30_3					
Lack of experienced consultants to provide or design IT-based solution systems iii_30_4					
IT-based systems do not improve productivity iii_30_5					
Others iii_30_6 (specify) iii_30_6_o					

Part D. REGIONAL SUPPLY CHAIN LINKAGES

III.31. Do you buy part or all your raw materials outside this region? _____ iii_31

1. Yes
2. No (Skip to III.36)

III.31 a. what is the reason you buy part or all your raw materials outside this region? _____

- iii_31a1 1. Not available locally
iii_31a2 2. Quality of locally available inputs not suitable for production
iii_31a3 3. A requirement of the client firm/export house/retailer
iii_31a4 4. Others iii_31a4_o

[Retailer refers to the firm for which this firm produces, i.e. your firm is the subcontractor. It may not be a retailer, so some other terminology is required]

III.32. What percentage of your work force come from:

This region	_____ % iii_32_1
Other regions of Thailand	_____ % iii_32_2
Neighboring countries	_____ % iii_32_3
Other countries	_____ % iii_32_4
Total	100

III.32 a. If some of your workers are from other regions or from other countries, what is the reason why? _____

Yes=1 No=2

- iii_32a1 1. local labor shortage
iii_32a2 2. local labor is more expensive than migrant labor
iii_32a3 3. Others iii_32a3_o

III.33. What proportion of your raw materials is shipped to your production site through the following transportation modes?

1. Land _____ % iii_33_1
2. Sea _____ % iii_33_2
3. Air _____ % iii_33_3

III.34. What proportion of production cost is transportation/logistics (associated insurance, taxes etc.) cost of inputs? _____ % iii_34

III.35. Where do you get information on design/quality (product characteristics) ? _____

Yes=1 No=2

- iii_35_1 1. Provided by the client firm/retailer
iii_35_2 2. Have own sales/ marketing department
iii_35_3 3. Others iii_35_3_o

III.36. Does the client firm/retailer enforce product quality standards? _____ iii_36

1. Yes
2. No (Skip to III.41)

III.36.a. How does the client firm/retailer enforce product quality standards? _____

Yes=1 No=2

- iii_36a_1 1. Providing information
iii_36a_2 2. Training staff
iii_36a_3 3. Others iii_36a_3_o

III.37. Are services to calibrate and test your machinery and equipment available in your region? _____ iii_37

1. Yes (Skip to III.42)
2. No

III.37.a. Where do you get this service from? _____ iii_37a

1. Bangkok
2. Other region of Thailand (Please Specify _____) iii_37a_o
3. Foreign country
4. Never used this service

III.38. What proportion of your finished products is shipped out through the following transportation modes?

1. Land _____ % iii_38_1
2. Sea _____ % iii_38_2
3. Air _____ % iii_38_3

III.39. What proportion of production cost is transportation/logistics (associated insurance, taxes etc.) cost of finished goods? _____ % iii_39

III.40. Does the retailer engage you in process or product R&D type of activities ? ____ Yes=1 No=2 iii_40

III.41. Does the retailer send employees (personnel exchanges) to work here to disseminate and diffuse new technologies into your production facility? ____ Yes=1 No= iii_41

SECTION IV: LABOR MARKET, EDUCATION AND SKILLS

Part A. LABOR RELATIONS

IV.1. Given your current level of output, if you were free to choose without restrictions your current level of employment what % of the current level would you choose? _____ % iv_1

- (If the answer is < 100 % → Answer IV.1a (Skip IV.1b)
 > 100 % → Answer IV.1b (Skip IV.1a)
 = 100 % → Skip to IV.2

IV.1.a Is any of the following a reason? Yes=1 No=2

1. Laws and regulations regarding the firing of workers _____ iv_1a1
2. Pressure from unions _____ iv_1a2
3. Pressure from political groups _____ iv_1a3
4. Fear of social sanctions _____ iv_1a4
5. Anticipation of an upturn in sales _____ iv_1a5
6. Others (please specify) iv_1a6_o _____ iv_1a6

IV.1.b Is any of the following a reason? Yes=1 No=2

1. Laws and regulations regarding the employment of foreign workers _____ iv_1b1
2. Difficulty in employing local workers _____ iv_1b2
3. Shortage of skilled workers _____ iv_1b3
4. Anticipation of a downturn in sales _____ iv_1b4
5. Others (please specify) iv_1b5_o _____ iv_1b5

IV.2. What are the major problems with labor regulations on a scale from 1 to 4 with the following meaning:

Code : 0 = No problem ; 1 minor obstacle → 4 = Major obstacle

	No Problem	Degree of Obstacle				Not Appl
	0	1	2	3	4	
(a) Dealing with hiring procedures for local workers	0	1	2	3	4	N/A=-77 iv_2_1
(b) Dealing with hiring procedures for foreign workers	0	1	2	3	4	N/A=-77 iv_2_2
(c) Layoff procedures and cost of retrenchment	0	1	2	3	4	N/A=-77 iv_2_3
(d) Limits on temporary hiring	0	1	2	3	4	N/A=-77 iv_2_4
(e) Inflexible salary scale for skilled workers	0	1	2	3	4	N/A=-77 iv_2_5
(f) Others (specify) iv_2_6_o	0	1	2	3	4	N/A=-77 iv_2_6

Part B. EDUCATION AND SKILLS

- IV.3. Do you currently have vacancies in your establishment in the following positions? Yes=1 No=2
1. Professionals (engineers, scientists and other university graduates) _____ iv_3_1
 2. Skilled production workers (skilled technicians) _____ iv_3_2
 3. Unskilled production workers _____ iv_3_3

- IV.4. How much time did it take to fill your most recent vacancy for a:
1. Professionals (engineers, scientists and other university graduates) _____ Weeks iv_4_1
 2. Skilled production workers (skilled technicians) _____ Weeks iv_4_2
 3. Unskilled production workers _____ Weeks iv_4_3

- IV.5. What are the most important causes of these vacancies? Rank in order of importance.

Code : 1= Most important → 7= Least important

1. Applicants demand very high wage _____ iv_5_1
2. Universities not producing a sufficient number of graduates _____ iv_5_2
3. Applicants do not have required basic skills _____ iv_5_3
4. Applicants do not have required technical skills _____ iv_5_4
5. No applicants for unskilled workers position _____ iv_5_5
6. High turnover of new recruits _____ iv_5_6
7. Others iv_5_7_o _____ iv_5_7

- IV.6. What are the most important considerations you use in recruiting? Rank in order of importance.

Code : 1= Most important → 7= Least important

1. Education level _____ iv_6_1
2. Technical skills _____ iv_6_2
3. Experience _____ iv_6_3
4. Loyalty _____ iv_6_4
5. Ethnic Quotas _____ iv_6_5
6. Interpersonal Skills _____ iv_6_6
7. Others (specify) iv_6_7_o _____ iv_6_7

- IV.7. What are the main channels through which you recruit new workers?

(in percentage of your new recruits in the past three years)

1. Factory door postings _____% iv_7_1
2. Friends recommendation _____% iv_7_2
3. Other workers recommendation _____% iv_7_3
4. Announcement in news papers _____% iv_7_4
5. Through Head Hunters _____% iv_7_5
6. Others iv_7_6_o _____% iv_7_6
- Total 100%

IV.8. How would you assess the quality of your current workforce?

(Skills Quality Codes: 1 = very poor, 2 = poor, 3 = fairly good, 4 = very good , Not applicable = 999)

Attributes	Professionals		Skilled Production Workers	
	Local	Foreign	Local	Foreign
English language proficiency	iv_8_eng1	iv_8_eng2	iv_8_eng3	iv_8_eng4
Professional Communication skills	iv_8_prof1	iv_8_prof2	iv_8_prof3	iv_8_prof4
Social Skills	iv_8_soc1	iv_8_soc2	iv_8_soc3	iv_8_soc4
Teamworking skills	iv_8_tea1	iv_8_tea2	iv_8_tea3	iv_8_tea4
Leadership skills	iv_8_lea1	iv_8_lea2	iv_8_lea3	iv_8_lea4
Time Management skills	iv_8_ti1	iv_8_ti2	iv_8_ti3	iv_8_ti4
Adaptability skills	iv_8_ad1	iv_8_ad2	iv_8_ad3	iv_8_ad4
Creativity/innovation skills	iv_8_cre1	iv_8_cre2	iv_8_cre3	iv_8_cre4
Numerical skills	iv_8_num1	iv_8_num2	iv_8_num3	iv_8_num4
Problem solving skills	iv_8_pro1	iv_8_pro2	iv_8_pro3	iv_8_pro4
IT skills	iv_8_it1	iv_8_it2	iv_8_it3	iv_8_it4
Technical/professional skills	iv_8_tec1	iv_8_tec2	iv_8_tec3	iv_8_tec4

IV.8.a. In your industry, what do you see as the three most critical skills/competencies that will be needed to keep up with the emerging technologies in the future?

1. _____ iv_8a1
2. _____ iv_8a2
3. _____ iv_8a3

IV.9. Did you hire fresh graduates from public vocational training institutions in 2002-2003? iv_9

1. Yes
2. No (Skip to IV.10)

IV.9.a. Could you please list three institutes from which you hire the most and assess the quality of their graduates ?

Name of Institute	Quality of graduates 1 = very poor 2 = poor 3 = fairly good 4 = very good
1. iv_9_1n	iv_9_1q
2. iv_9_2n	iv_9_2q
3. iv_9_3n	iv_9_3q

IV.10. Please give your assessment of the following Institutes:

<i>Institute</i>	Have you hired fresh graduates from this particular institution? 1=yes 2=No 3=Never heard about this institute	If yes, How would you assess the quality of its graduates ? 1 = very poor 2 = poor 3 = fairly good 4 = very good
1. Rajabhat Institute	iv_10_1a	iv_10_1b
2. Rajamangala Institute	iv_10_2a	iv_10_2b
3. Vocational College	iv_10_3a	iv_10_3b
Other (Please Specify) iv_10_4_o	iv_10_4a	iv_10_4b

Part C. EMPLOYER-PROVIDED TRAINING

IV.11. Did your plant run formal training programs for its employees during the fiscal year of 2002-2003?___ iv_11

IV.12. Have you sent your workers for training in a Skills Development institute in the past three years?___ iv_12

1. Yes
2. No (Skip to IV.14)

IV.12.a. Could you please list the three institutes you have used the most and assess impact of training on worker's performance?

<i>Name of Institute</i>	Impact of training on worker's performance 1 = very poor 2 = poor 3 = fairly good 4 = very good
1. iv_12_1a	iv_12_1b
2. iv_12_2a	iv_12_2b
3. iv_12_3a	iv_12_3b

IV.13. Could you rank these institutes along the listed attributes?

Please rank on a scale of 1-4 with 1 = very poor, 2 = poor, 3 = fairly good, 4 = very good

Attributes	Institute 1.	Institute 2.	Institute 3.
Outreach and dissemination of their programs	iv_13o1	iv_13o2	iv_13o3
Ease of application process	iv_13e1	iv_13e2	iv_13e3
Theoretical content of training	iv_13t1	iv_13t2	iv_13t3
Practical content of training	iv_13p1	iv_13p2	iv_13p3
Relevance/effectiveness of training received by employees for your Establishment	iv_13r1	iv_13r2	iv_13r3

(Skip to Section V)

IV.14. If you have not worked with any Skills Development support institutions in the past three years, what are the three most important reasons? Please rank.

1st. iv_14_1
2nd. iv_14_2
3rd. iv_14_3

1. Do not know of any of them
2. Their services are not relevant to your plant's needs
3. Don't know anyone there to make a first point of contact
4. Application process too cumbersome
5. Tried it before and it was not a fruitful experience
6. Others (Specify) _____ iv_14_6_o

SECTION V: INVESTMENT CLIMATE CONSTRAINTS AND BUSINESS RELATIONS

Part A. Investment Climate Constraints

V.1. Please judge on a four-point scale how problematic the following factors are for the operation and growth of your business. Code : 0 = No problem ; 1 = Minor obstacle → 4 = Major obstacle ; N/A = Not applicable = 999

	No Problem	Degree of Obstacle				Not Appl	
	0	1	2	3	4	N/A=999	
A. Telecommunications	0	1	2	3	4	N/A=999	v_1a
B. Electricity	0	1	2	3	4	N/A=999	v_1b
C. Transportation	0	1	2	3	4	N/A=999	v_1c
D. Access to Land	0	1	2	3	4	N/A=999	v_1d
E. Tax rates	0	1	2	3	4	N/A=999	v_1e
F. Tax administration	0	1	2	3	4	N/A=999	v_1f
G. Customs and trade regulation administration	0	1	2	3	4	N/A=999	v_1g
H. Labor regulations	0	1	2	3	4	N/A=999	v_1h
I. Skills and education of workers	0	1	2	3	4	N/A=999	v_1i
J. Business licensing and registration	0	1	2	3	4	N/A=999	v_1j
K. Access to Domestic Credit	0	1	2	3	4	N/A=999	v_1k
L. Access to Foreign Credit	0	1	2	3	4	N/A=999	v_1l
M. Cost of Financing (e.g. interest rates)	0	1	2	3	4	N/A=999	v_1m
N. Economic policy uncertainty	0	1	2	3	4	N/A=999	v_1n
O. Macro-economic instability (inflation, exch. rate)	0	1	2	3	4	N/A=999	v_1o
P. Corruption	0	1	2	3	4	N/A=999	v_1p
Q. Crime, theft and disorder	0	1	2	3	4	N/A=999	v_1q
R. Anti-competitive practices (e.g. monopoly)	0	1	2	3	4	N/A=999	v_1r

V.2. What are the three biggest obstacles to doing business in Thailand in order of importance?

1st	_____	v_2_1
2nd	_____	v_2_2
3rd	_____	v_2_3

▪ No problem/non applicable	1	
▪ Ownership regulations	2	
▪ Tax regulations and/or high taxes	3	
▪ Skilled labor shortage	4	
▪ Labor regulations	5	
▪ Obtaining land and buildings	6	
▪ Foreign currency regulations	7	
▪ Lack of business support services	8	
▪ Inadequate supply of infrastructure	9	
▪ Utility prices	10	
▪ Inadequate access to credit	11	
▪ Import regulations	12	
▪ High collateral requirements	13	
▪ High interest rates	14	
▪ Insufficient demand for my products	15	
▪ Competition from imports	16	
▪ Crime and theft	17	
▪ Official corruption	18	
▪ Regulations for starting a business, new	19	
▪ Bureaucratic burden	20	
▪ Political instability	21	
▪ Lack of insurance (product liability)	22	
▪ Others (specify) _____	23	v_2_1_23_o , v_2_2_23_o , v_2_3_23_o

Part B. Business Relations

V.3. Is your establishment/firm a member of a business association or chamber of commerce? v_3

1. Yes
2. No (Skip to V.4)

V.3.a. How many such associations does [KE] belong to? _____(number) v_3a

V.3.b. For the association that is the most important to your establishment, please indicate if they provide the following services. If so, what is the value of this service to your firm?

0= no value; 1= minor value; 2= moderate value; 3 = major value; 4= critical value to your firm; 999=Not Provided

	<u>Not Provided</u>	<u>Value to your firm</u>
1. Lobbying government	v_3b1	
2. Resolution of disputes (with officials, workers or other firms)	v_3b2	
3. Information and/or contacts on domestic product and input markets	v_3b3	
4. Information and/or contacts on international product and input markets	v_3b4	
5. Accrediting standards or quality of products	v_3b5	
6. Information on government regulations	v_3b6	

V.3.c. Does this association include any of the following as members?

	Yes=1	No=2	DK=888 (Do Not Know)		
1. [KE] suppliers	1	2	DK=888	v_3c1
2. [KE] customers	1	2	DK=888	v_3c2
3. [KE] competitors	1	2	DK=888	v_3c3
4. Financial institutions	1	2	DK=888	v_3c4

V.4. For each of the following business services available in Thailand, please assess whether it is affordable.

If yes, please evaluate the quality on a 1-4 scale.

(Quality: 1 = very poor, 2 = poor, 3 = fairly good, 4 = very good, N/A = not applicable)

				Affordable		Quality					
						Very Poor		Very Good		Not applicable	
1) Engineering & design	v_4_1a	Yes	No	1	2	3	4	N/A=999	v_4_1b		
2) Management & Marketing	v_4_2a	Yes	No	1	2	3	4	N/A=999	v_4_2b		
3) Accounting	v_4_3a	Yes	No	1	2	3	4	N/A=999	v_4_3b		
4) Legal services	v_4_4a	Yes	No	1	2	3	4	N/A=999	v_4_4b		
5) Insurance	v_4_5a	Yes	No	1	2	3	4	N/A=999	v_4_5b		
6) IT services	v_4_6a	Yes	No	1	2	3	4	N/A=999	v_4_6b		

V.5. Have you had disputes with clients such as a delay or suspension of payment, return shipment or cancellation of future shipments over the last 2 years? v_5

1. Yes

2. No (Skip to V.6)

V.5.a. Were these disputes resolve through ...?

1) Court v_5a1

- Over the last 2 years, what percent of your establishment's disputes over payments were resolved by court action? _____ % v_5a1_1

- On average, how many weeks did these court cases take to resolve? _____ weeks v_5a1_2

2) Federal Government v_5a2

3) State government v_5a3

4) Business association v_5a4

5) Arbitration v_5a5

6) Amicable v_5a6

7) Others v_5a7_o v_5a7

V.6. To what degree do you agree with this statement? _____ v_6

"I am confident that the judicial system will enforce my contractual and property rights in business disputes."

1. Fully disagree
2. Disagree in most cases
3. Tend to disagree
4. Tend to agree
5. Agree in most cases
6. Fully agree

Part C. Expectations

V.7. What is your expectation of the following variables next year (2004)

	At the end of 2004	
	Minimum	Maximum
1. Growth of your sales (in %)	v_7_1mi	v_7_1ma
2. Cost per unit of locally produced raw material (in Baht)	v_7_2mi	v_7_2ma
3. Cost per unit of imported raw material (in Baht)	v_7_3mi	v_7_3ma

**SECTION VI:
INFRASTRUCTURE, ACCESS TO LAND AND GOVERNMENT REGULATION**

Part A. Licenses, Permits, and Government Regulation

VI.1. If [KE] was to be established in 2002-2003, how many licenses, permits and approvals/certificates would you need to obtain before starting production?

- a) Number of licenses _____ vi_1a
 b) Number of permits _____ vi_1b
 c) Number of approvals/certificates _____ vi_1c

VI.2. Who would issue these licenses, permits and approvals/certificates and how long it would take?

Issuing authority	Licenses		Permits		Approvals/Certificates	
	Number of licenses	Average Time to obtain (weeks)	Number of Permits	Average Time to obtain (weeks)	Number of approvals/certificates	Average Time to obtain (weeks)
1. Central government (e.g. Department of Industrial Works, Ministry of Commerce etc.)	vi_2_1_a	vi_2_1_b	vi_2_1_c	vi_2_1_d	vi_2_1_e	vi_2_1_f
2. Local government (e.g. municipality, Local Administration etc.)	vi_2_2_a	vi_2_2_b	vi_2_2_c	vi_2_2_d	vi_2_2_e	vi_2_2_f
3. Specific authority (e.g. Food and Drug Administration, Department of Fisheries, Royal Forest Department, Department of Medical Sciences, etc.)	vi_2_3_a	vi_2_3_b	vi_2_3_c	vi_2_3_d	vi_2_3_e	vi_2_3_f
4. Others (Specify) vi_2_4_o	vi_2_4_a	vi_2_4_b	vi_2_4_c	vi_2_4_d	vi_2_4_e	vi_2_4_f

VI.3. How many of these licenses, permits and approvals/certificates do you need to renew periodically (i.e. every year, 2 years)?

- licenses _____ vi_3_1
 permits _____ vi_3_2
 approvals/certificates _____ vi_3_3

VI.4. In 2003, did you use agents, consultants, or one or more employees to help you process these permits, licenses and **approvals/certificates**? _____ vi_4

1. Yes
 2. No (skip to VI.5)

VI.4.a. At what cost or salary? _____ (Baht) vi_4a

VI.5. How long did it take to obtain your most recent license/permit/approvals/certificates from the following agencies? (in days)

Please write N/A if not applicable

1. Ministry of Commerce _____ (Days) vi_5_1
 2. Department of industrial works _____ vi_5_2
 3. Immigration Department _____ vi_5_3
 4. Land office _____ vi_5_4
 5. Local Government _____ vi_5_5
 6. Others ...vi_5_6_o _____ vi_5_6

VI.6. Based on the experience of your establishment over the last two years, how long did it take to obtain each of the following?

- | | | | | |
|----|---------------------------|--------------|---------|--------|
| 1) | Fixed telephone line | _____ (days) | N/A=999 | vi_6_1 |
| 2) | Electrical connection | _____ (days) | N/A=999 | vi_6_2 |
| 3) | Water connection | _____ (days) | N/A=999 | vi_6_3 |
| 4) | Approval for construction | _____ (days) | N/A=999 | vi_6_4 |
| 5) | Import permit | _____ (days) | N/A=999 | vi_6_5 |
| 6) | Operating license | _____ (days) | N/A=999 | vi_6_6 |

VI.7. On average, how many days were spent last year (2003) in dealing (i.e. in inspections, meetings) with each of the following agencies in relation to of your business and what was the associated cost?

Agency	Total number of days spent in contact with agency dealing with regulation of the business.	Total Cost (Baht)
Revenue Department	vi_7_r1	vi_7_r2
Social Security Office	vi_7_s1	vi_7_s2
Immigration Division	vi_7_i1	vi_7_i2
Department of Industrial Works	vi_7_d1	vi_7_d2
Local authority (e.g. municipality, Local Administration etc.)	vi_7_l1	vi_7_l2
Others (Specify)vi_7_o	vi_7_o1	vi_7_o2

VI.8. How many times did inspectors from these agencies visit your establishment last year? _____ vi_8

VI.9. What percentage of senior management's time per year is spent in dealing with requirements imposed by government regulations [e.g. taxes, customs, labor regulations, licensing and registration] including dealings with officials, completing forms, etc.? _____ % vi_9

VI. 10. Please give your assessment of the following Institutions:

	Have you received incentives/grants or loans from these institutions in the past 3 years? 1=yes 2=No, I Never heard about the scheme 3. No, I applied and was turned down 4. No, never applied because process too long and complicated 5. Never used	If yes, when did you get this benefit? (Year)	How critical was this to your plant? 0= no value 1= minor value 2= moderate value 3= major value 4= critical	What is the single most important problem with this institution?
Board of Investment	vi_10_bo1	vi_10_bo2	vi_10_bo3	vi_10_bo4
IFCT	vi_10_if1	vi_10_if2	vi_10_if3	vi_10_if4
SME Bank	vi_10_sm1	vi_10_sm2	vi_10_sm3	vi_10_sm4
Small Industry Credit Guarantee Corporation (SICGC)	vi_10_sic1	vi_10_sic2	vi_10_sic3	vi_10_sic4
Office of SME Promotion	vi_10_of1	vi_10_of2	vi_10_of3	vi_10_of4
Institute for Small and Medium Enterprises Development	vi_10_ism1	vi_10_ism2	vi_10_ism3	vi_10_ism4
Thailand Research Fund (TRF)	vi_10_trf1	vi_10_trf2	vi_10_trf3	vi_10_trf4
NSTDA	vi_10_nst1	vi_10_nst2	vi_10_nst3	vi_10_nst4
Others (Specify) vi_10_o	vi_10_o1	vi_10_o2	vi_10_o3	vi_10_o4

Part B. Provision of Public Goods

VI.11. Please estimate the losses (as a percent of total sales) from theft, robbery or vandalism against your establishment in the last year? _____ % vi_11

a) What percentage of the incidents did you report to the police? _____ % vi_11a

b) Of those reported, what percentage was solved? _____ % vi_11b

VI.12. Please estimate your establishment's costs (as a % of its total sales) of providing security? _____ % vi_12

VI.13. On average, what percentage of your shipment is lost while being transported due to breakage, theft or spoilage? _____% vi_13

VI.14. On average, how many times per month did your establishment experience the following service interruptions in 2002-2003, and how long did they last?

	# times per month	Ave. duration
a) Power outages or surges from the public grid?	_____ vi_14_a1	_____ Hrs vi_14_a2
b) Insufficient water supply?	_____ vi_14_b1	_____ Hrs vi_14_b2
c) Interruption fixed telephone service?	_____ vi_14_c1	_____ Hrs vi_14_c2
d) Transport disruption?	_____ vi_14_d1	_____ Hrs vi_14_d2

VI.15. What percent of your production value was lost due to power interruptions from the public grid in 2003? vi_15

VI.16. Do you own or share a generator? _____ vi_16

1. Yes
2. No (Skip to VI.18.b.)

VI.16.a. When did you acquire this generator? _____ year vi_16a

VI.16.b. What was the cost of acquisition ? _____ (Baht) vi_16b

17. What percentage of your consumption of electricity is from your own or shared generator in year 2003? vi_17

VI.18. What share of your firm's water supply is from: a. public sources? _____ % vi_18a

b. your own well or tank? _____ % vi_18b

c. purchased from private vendors? _____ % vi_18c

Total 100

Part C. Access to Land:

VI.19. Of the land and buildings occupied by this establishment, what percent is owned or leased/rented?

	Owned	Leased	rented	If leased/rented, av. contract
a. Land	vi_19a1	vi_19a2	vi_19a3	vi_19a4
b. Buildings	vi_19b1	vi_19b2	vi_19b3	vi_19b4

OWN

VI.20. When did you last acquire land or building over a piece of land for business purposes? _____ year vi_20

VI.21. Could you use any part of the land or buildings as collateral for Bank loans? _____ Yes =1 No =2 vi_21

VI.22. How much have you invested on the land since you acquired it including outlays on buildings, other construction and land improvement? _____ Baht. vi_22

RENT

VI.23. When did you last sign a contract to rent a facility for business purposes? _____ year vi_23

VI.24. How much is the monthly rental for the buildings? _____ Baht vi_24

VI.25. How many months of rent did you have to pay as deposit? _____ vi_25

VI.26. How much is the monthly rental for land? _____ Baht vi_26

LEASE

VI.27. What is the size of the total non-residential land on which you have leased? _____ (squared meters) vi_27

VI.28. When did you last acquire a piece of land for business purposes? _____ year vi_28

VI.29. Whom did you acquire it from? _____ vi_29

Codes: 1= Federal government

2= Local government

3= Previous leaseholder

4= Others (specify) vi_29_o

VI.30. How much is the total cost of the lease? _____ Baht vi_30

VI.31. How much did you incur in down-payment? _____ Baht vi_31

VI.32. How much installment did you pay in year 2002? _____ Baht vi_32

VI.33. How much installment do you pay in year 2003? _____ Baht vi_33

VI.34. Could you sell your leasehold if you wanted to? ____ vi_34

1. Yes
2. No (skip to VI.36)

VI.34.a. how much would you get if you were to sell the leasehold now? _ _____ Baht vi_34a

VI.35. Could you sub-lease any part of the land or buildings thereon if you wanted to? _ ____ Yes =1 No=2 vi_35

Part D. Location:

VI.36.

Region	a) Is the business environment in this region _____ is as 1=better 2=same 3= worse 888=not applic 999=don't know than where KE is based now ?	b) Is this region better, worse or the same when compare with where [KE] is based now with respect to the following ... Code: better=1 same=2 worse=3 Don't know=888 Not applicable=999					
		A. Power supply	B. Transportation	C. Telecommunications	D. Access to land	E. Availability of suppliers	F. Labor quality
North	vi_36_n1	vi_36_n2	vi_36_n3	vi_36_n4	vi_36_n5	vi_36_n6	vi_36_n7
Central	vi_36_c1	vi_36_c2	vi_36_c3	vi_36_c4	vi_36_c5	vi_36_c6	vi_36_c7
Grand Bangkok	vi_36_bk1	vi_36_bk2	vi_36_bk3	vi_36_bk4	vi_36_bk5	vi_36_bk6	vi_36_bk7
East	vi_36_ea1	vi_36_ea2	vi_36_ea3	vi_36_ea4	vi_36_ea5	vi_36_ea6	vi_36_ea7
Upper North-East	vi_36_une1	vi_36_une2	vi_36_une3	vi_36_une4	vi_36_une5	vi_36_une6	vi_36_une7
Lower North- East	vi_36_lne1	vi_36_lne2	vi_36_lne3	vi_36_lne4	vi_36_lne5	vi_36_lne6	vi_36_lne7
South	vi_36_s1	vi_36_s2	vi_36_s3	vi_36_s4	vi_36_s5	vi_36_s6	vi_36_s7

VI.37. Which region has the best business environment? _____ vi_37

VI.38. By what percent would your cost of production be cut if you were based in that region? _____% vi_38

VI.39. Which region has the worst business environment? _____ vi_39

VI.40. By what percent would your cost of production rise if you were based in that region? ____% vi_40

SECTION VII: INTERNATIONAL TRADE

Part A: Export Incentives

Facility	VII.1. Are you currently using or benefiting from this facility? 1=yes 2=no	VII.2. How long did it take to process the application including payment? (Number of days)
1. E-commerce Export Promotion	vii_1_ec	vii_2_ec
2. Promotion of Thailand Brands	vii_1_pr	vii_2_pr
3. Exports Promotion to new market (2003-2005)	vii_1_ex	vii_2_ex
4. Distribution Networking	vii_1_di	vii_2_di
5. Arrange sale promotion with Department store	vii_1_ar	vii_2_ar
6. Export one stop service	vii_1_exo	vii_2_exo
7. Prime Minister's Export Award 2003 (PM Award)	vii_1_pri	vii_2_pri
8. Deduction on Cost of Developing Websites	vii_1_ded	vii_2_ded
9. Tax Incentives for Offshore Trading Via Websites	vii_1_tax	vii_2_tax
10. Others.....vii_o	vii_1_o	vii_2_o

Part B. Transport and Customs

VII.3. Did you directly export any part of your output in 2002-2003? vii_3

1. Yes What percent of your export to total sales? _____ % vii_3_1
2. No (skip to VII.4)

VII.3.a. On average, how long did it take a shipment of your exports to reach the point of customs clearance?
_____ days vii_3a

VII.3.b. What was the average and the longest number of days it took you to clear Thailand customs?
_____ days on average vii_3b_av
_____ longest number of days vii_3b_lo

VII.3c. What percent of the value of your export earnings was transport costs in year 2002-2003? _____ % vii_3c

VII.4. Did you directly import equipment or other inputs in 2002-2003? vii_4

1. Yes
2. No (skip to VII.5)

VII.4.a. What was the average and the longest number of days it took you to clear Thailand customs?
_____ days on average vii_4a_1
_____ longest number of days vii_4a_2

VII.4.b. When was your last consignment of such inputs delivered to you? vii_4b_1 month vii_4b_2 year

VII.4.c. Where did the consignment originate from? vii_4c_____ (country of origin, not transit)

VII.4.d. How long did it take the consignment to reach the port/airport of transit from the country of origin?
_____ days vii_4d

VII.5. What are the 3 most important factors that constitute an obstacle or completely inhibit you from exporting?

1st _____ vii_5_1
2nd _____ vii_5_2
3rd _____ vii_5_3

Examples:

1. Shipping and transport costs
2. Costs of obtaining visas for immigration of temporary and permanent employees
3. Cost of meeting foreign legal and product standards
4. Inability to produce to potential clients' standards, specifications, and schedule
5. Cannot match prices of domestic competitors who export
6. Cannot match prices of foreign competitors
7. Foreign clients demand upgrades and changes in specifications too frequently
8. Recovering payments from abroad is difficult
9. Supplying the domestic market is relatively more profitable
10. Costs of establishing a foreign distribution network (and where applicable after sales service)
11. Domestic content requirements
12. Others (please specify) _____ vii_5_1_12_o, vii_5_2_12_o , vii_5_3_12_o

Manufacturing Sector Survey Questionnaire

Part II-A

(To be administered to the Finance Manager/Accountant)

About the survey

The Foundation for the Thailand Productivity Institute (FTPI) has been given the responsibility to conduct a productivity and Investment Climate Survey (PICS) with the assistance of the World Bank. This work is conducted under the supervision of the National Economic and Social Development Board (NESDB), and its results will support Thailand's initiative to improve productivity and competitiveness of firms operating in Thailand.

The Productivity and Investment Climate Survey is a collaborative effort of the Thailand Government and the World Bank. Similar surveys are being carried out in several other countries. Parts of the survey questionnaire can be filled out by your staff working from your records; other parts should be answered by the owner or plant manager. A team of enumerators will visit your plant to go through the questionnaire with you or your staff. **Only aggregate or average information from a large sample of firms will be published and we guarantee confidentiality for all individual responses.**

The general purpose of the survey is to understand the investment climate in Thailand and how it affects business performance, with the objective to improve it. We will provide you with a summary report that will be directly useful to you in that it will enable you to benchmark your business and your industry against domestic and international competitors. The survey will also provide useful information about the investment climate in Thailand in the international context. The World Bank's experience in a wide range of countries shows that this information can be crucial for improving the investment climate so that businesses and workers can prosper.

The questionnaire begins with items about the origin and shareholding status of a business, including questions about the background of the owner or manager. This information is useful to determine if and how the interaction between investment climate and business performance varies by business types (foreign versus domestic, or new versus experienced). It then proceeds to issues of finance (to examine financial constraints on business and expansion), technology (to assess the ease of access to new technologies), relationship with other firms (to gauge the importance of associations and networks), government regulation, contract enforcement, labor relations and international trade. What will eventually emerge is a comprehensive picture of the environment in which businesses are operating in Thailand, both their strengths and weaknesses.

Your cooperation in ensuring the success of this survey is very much appreciated.

To Enumerators:

For precision of statements, the acronym "KE"-for a fictional business, Khon-Kaen Electronics- appears in places where the name of the participating business should be. Similarly "Electronics" appears where the sector of activity of the business should be.

ESTABLISHMENT NAME:

ESTABLISHMENT NO. ____ id_pics

Address:

ISIC Code: ____ isic

INDUSTRY CODE _____ items
subitems

1. Food Processing
 - 1.1 Canned Food
 - 1.2 Frozen Food
 - 1.3 Sugar
2. Textile
 - 2.1 Yarn
 - 2.2 Clothes
3. Clothing
 - 3.1 Clothing for men, women and child

4. Automotive Parts
 - 4.1 Automotive parts
5. Electronics & Electrical Appliances
 - 5.1 Electronics Products
 - 5.2 Electronics Parts
 - 5.3 Household Electrical Appliances
6. Rubber and Plastics
 - 6.1 Plastic Packaging
 - 6.2 Household Plastic Products
 - 6.3 Rubber

7. Wood products and Furniture
 - 7.1 Wood Furniture
8. Machinery and Equipment
 - 8.1 Machinery

REGION CODE _____ code_fac

5. North
6. Central
7. Bangkok and Vicinity

4. East
5. Northeast

6. South

Province: province_code

City Codes:

City Name:

Name of Enumerator:

Name of Respondent:

Current Position:

Email:

Phone number:

Fax Number:

Interview Date:

Start Time:

Finish time:

Enumeration validated by (Inspector):

Date/Time:

SECTION VIII: PRODUCTS AND INPUTS

VIII.1. Please provide the following information on the three most important products of ***your plant*** in the fiscal year of 2002.

(Note: please indicate only one product for each row)

Product description (string variables in Thai)	Unit	Quantity Sold (including exports)	Quantity Exported	Total sales including exports Baht)	Value of Exports (Baht)	Year of first Production by your plant	Year of first export by <i>your plant</i>
---	------	---	----------------------	---	-------------------------------	--	--

1 viii_1_a1	viii_1_a2	viii_1_a3	viii_1_a4	viii_1_a5	viii_1_a6	viii_1_a7	viii_1_a8
2 viii_1_b1	viii_1_b2	viii_1_b3	viii_1_b4	viii_1_b5	viii_1_b6	viii_1_b7	viii_1_b8
3 viii_1_c1	viii_1_c2	viii_1_c3	viii_1_c4	viii_1_c5	viii_1_c6	viii_1_c7	viii_1_c8

viii_2_ Please provide the following information on the three most important products of ***your plant*** in the fiscal year of 2001.

(Note: please indicate only one product for each row)

Product description (string variables in Thai)	Unit	Quantity Sold (including exports)	Quantity Exported	Total sales including exports Baht)	Value of Exports (Baht)	Year of first Production by your plant	Year of first export by <i>your plant</i>
1 viii_2_a1	viii_2_a2	viii_2_a3	viii_2_a4	viii_2_a5	viii_2_a6	viii_2_a7	viii_2_a8
2 viii_2_b1	viii_2_b2	viii_2_b3	viii_2_b4	viii_2_b5	viii_2_b6	viii_2_b7	viii_2_b8
3 viii_2_c1	viii_2_c2	viii_2_c3	viii_2_c4	viii_2_c5	viii_2_c6	viii_2_c7	viii_2_c8

VIII.3. Please provide the following information on the three most important raw materials (in terms of value) of ***your plant*** in the fiscal year of 2002.

(Note: please indicate only one input for each row)

Raw material description (string variables in Thai)	Unit	Quantity purchased (including imports)	Quantity imported	Value of purchases including imports (Baht)	Value of imports (Baht)
1 viii_3_a1	viii_3_a2	viii_3_a3	viii_3_a4	viii_3_a5	viii_3_a6
2 viii_3_b1	viii_3_b2	viii_3_b3	viii_3_b4	viii_3_b5	viii_3_b6
3 viii_3_c1	viii_3_c2	viii_3_c3	viii_3_c4	viii_3_c5	viii_3_c6

VIII.4. Please provide the following information on the three most important raw materials (in terms of value) of ***your plant*** in the fiscal year of 2001.

(Note: please indicate only one input for each row)

Raw material description (string variables in Thai)	Unit	Quantity purchased (including imports)	Quantity imported	Value of purchases including imports (Baht)	Value of imports (Baht)
1 viii_4_a1	viii_4_a2	viii_4_a3	viii_4_a4	viii_4_a5	viii_4_a6
2 viii_4_b1	viii_4_b2	viii_4_b3	viii_4_b4	viii_4_b5	viii_4_b6
3 viii_4_c1	viii_4_c2	viii_4_c3	viii_4_c4	viii_4_c5	viii_4_c6

VIII.5. For the domestic inputs, what % comes from the same region where [KG] is located? _____ % viii_5

VIII.6. Approximately what per cent of annual purchases of raw materials by **your plant** was from the following sources ...?

1. Produced domestically by other divisions of your company
2. Produced domestically by other companies
3. Imported raw materials (if no, skip to VIII.8)

	2001	2002
	viii_6_1_01	viii_6_1_02
	viii_6_2_01	viii_6_2_02
	viii_6_3_01	viii_6_3_02
Total	100 %	100%

VIII.7. What is the percentage of **your plant's** imports of raw materials from the countries of origin?

Country of import :	Per cent of annual imports of raw materials		Year of import for the first time?
	2002	2001	(year)
1 viii_7_1	viii_7_1_01	viii_7_1_02	viii_7_1_y
2 viii_7_2	viii_7_2_01	viii_7_2_02	viii_7_2_y
3 viii_7_3	viii_7_3_01	viii_7_3_02	viii_7_3_y
4 viii_7_4	viii_7_4_01	viii_7_4_02	viii_7_4_y
5 Other countries	viii_7_5_01	viii_7_5_02	viii_7_5_y
6 Local traders (Thai importers)	viii_7_6_01	viii_7_6_02	viii_7_6_y
7 viii_7_7	viii_7_7_01	viii_7_7_02	viii_7_7_y
TOTAL	100%	100%	

VIII.8. For the domestic sales, what % went to the same region where [KG] is located? _____ % viii_8

VIII.9. What per cent of **your plant's** sales are ...?

	2002	2001	2000
Sold domestically	viii_9_S02	viii_9_S01	viii_9_S00
Exported directly	viii_9_ED02	viii_9_ED01	viii_9_ED00
Export Indirectly (through distributor)	viii_9_EI02	viii_9_EI01	viii_9_EI00
	100%	100%	100%

VIII.10. What is the percentage distribution of **your plant's** exports by country of destination:

Country	Per cent of annual exports		Year of export for the first time
	2002	2001	(year)
1 viii_10_1	viii_10_1_02	viii_10_1_01	viii_10_1_y
2 viii_10_2	viii_10_2_04	viii_10_2_03	viii_10_2_y

3 viii_10_3	viii_10_3_06	viii_10_3_05	viii_10_3_y
4 viii_10_4	viii_10_4_08	viii_10_4_07	viii_10_4_y
5 viii_10_5	viii_10_5_10	viii_10_5_09	viii_10_5_y
6.Other countries..... viii_10_6	viii_10_6_12	viii_10_6_11	viii_10_6_y
TOTAL	100%	100%	

VIII.11. How important are the following factors in relation to imports that compete with your major products?

		Not important	Moderately important	Very important	
1.	(a) low price	0	1.....2.....3.....4		viii_11a
2.	(b) durability	0	1.....2.....3.....4		viii_11b
3.	(c) better material quality	0	1.....2.....3.....4		viii_11c
4.	(d) better model/design	0	1.....2.....3.....4		viii_11d
5.	(e) others (specify) viii_11e_o		1.....2.....3.....4		viii_11e

VIII.12. What percent of material inputs and supplies are lower than the agreed upon quality? ____% viii_12

VIII.13. What percentage of sales are lost due to delivery delays from suppliers?____% viii_13

Relations with Suppliers:

VIII.14. Please provide information on suppliers of two most important raw materials (in the order of importance)

Description of raw materials (string variables in Thai)	Total number of suppliers	How many suppliers of this raw materials are in the market ?	Is this raw material made to your unique specification? Yes=1 ; No=2
1 viii_14a_1	viii_14a_2	viii_14a_3	viii_14a_4
2 viii_14b_1	viii_14b_2	viii_14b_3	viii_14b_4

VIII.15. Relationships with **main** supplier for each of two main raw materials (same raw materials as listed above)

	% of this raw material is bought from this supplier	Number of times delivered per year	Is your firm the most important customer of this supplier Yes=1 ; No=2	How long is your relationship (years)	% of raw material that you pay for before delivery	% of raw material that you buy on credit	Number of days of credit
1	viii_15a_1	viii_15a_2	viii_15a_3	viii_15a_4	viii_15a_5	viii_15a_6	viii_15a_7
2	viii_15b_1	viii_15b_2	viii_15b_3	viii_15b_4	viii_15b_5	viii_15b_6	viii_15b_7

VIII.16. If your main supplier failed to deliver your 2 raw materials, how long would it take you to obtain replacement supplies?

	Months	Days
--	--------	------

Raw material 1	viii_16_1m	viii_16_1d
Raw material 2	viii_16_2m	viii_16_2d

VIII.17. How far is your main supplier?

	KM (domestic)	Foreigner (country)
Raw material 1	viii_17_1do	viii_17_1ab (name)
Raw material 2	viii_17_2do	viii_17_2ab (name)

VIII.18. When you receive a new delivery from your main supplier, how much inventory of these inputs do you still have in stock, generally?
(Please answer in number of days of production)

Raw material 1 ____ (days of production) viii_18_1

Raw material 2 ____ (days of production) viii_18_2

VIII.19. Did you have to stop operation in the last 3 years because of shortage of inputs? ____ Yes=1, No=2 viii_19

VIII.20. If one of your suppliers cheats another firm, would you find out? ____ Yes=1, No=2 viii_20

VIII.21. Have you had disputes with suppliers such as a delay or suspension of payment, return shipment or cancellation of future shipments over the last 3 years? ____ viii_21

1. Yes these disputes resolve through....
- | | |
|--------------------------------------|-----------|
| 1) Court | viii_21_1 |
| 2) Federal Government | viii_21_2 |
| 3) State government | viii_21_3 |
| 4) Business association | viii_21_4 |
| 5) Arbitration | viii_21_5 |
| 6) Amicable | viii_21_6 |
| 7) Others (specify... viii_21_7_cau) | viii_21_7 |
2. No

Relations with Clients:

VIII.22. On average, what percent of your sales is

- | | | |
|----------------------------------|--------------------------------|----------|
| a. paid before delivery | ____% | viii_22a |
| b. paid upon delivery | ____% | viii_22b |
| c. bought on credit | ____% (if No, skip to VIII.25) | viii_22c |
| d. others (specify viii_22d_cau) | ____% | viii_22d |
| | 100% | |

VIII.23. If you offer credit to your customers (i.e. accounts receivables)

1. Do you charge a different price for customers that buy on credit (relative to cash or before delivery) _____ (1= Yes, 2= No)
viii_23_1
2. How long do you **allow** your customer to use the credit _____ (days) viii_23_2
3. On average, how fast do you get the **actual** payment _____ (days) viii_23_3
4. What % of your annual sales is tied up in overdue payments? ____ % viii_23_4

VIII.24. How do you finance the credit you offer to your customers (percent of total financing)

- a. Credit you obtain from your suppliers _____% viii_24_1
 - b. Bank credit _____% viii_24_2
 - c. Unlicensed lender/informal lenders..... _____% viii_24_3
 - d. Retained earnings _____% viii_24_4
 - e. Others viii_24_5_cau_____ _____% viii_24_5
- 100%

VIII.25. What % of sales normally goes to your largest customer? _____% viii_25

VIII.26. If one of your clients deceives another firm, would you find out? _____ Yes=1, No=2 viii_26

VIII.27. What is **[KE's]** share in the domestic market for its most important product? ____% viii_27

VIII.28. Does your enterprise regularly use e-mail or a website in its interactions with clients and suppliers?

- a. E-mail? _____ 1 = Yes, 2 = No viii_28a
 - b. Website? _____ 1 = Yes, 2 = No viii_28b
- If Yes to b.**, What percentage of your sales is done through your website? _____% viii_28b_pct

VIII.29. How far is your main client?

	KM (domestic)	Foreigner (country)
Product 1	viii_29_1do	viii_29_1ab (name)
Product 2	viii_29_2do	viii_29_2ab (name)

VIII.30. Within your main product line, how many competitors, suppliers and buyers do you have and are they domestic or foreign owned?

	Domestic Private Firms	Domestic State Owned Firms	Foreign Owned Firms
a) competitors	viii_30a1	viii_30a2	viii_30a3
b) suppliers	viii_30b1	viii_30b2	viii_30b3
c) buyers	viii_30c1	viii_30c2	viii_30c3

SECTION IX: CORPORATE FINANCE

IX.1. What was **your plant's** sales revenue in Baht for the fiscal year of

(a) 1997? (five years ago)

ix_1a

(b) 1992? (ten years ago)

ix_1b

IX.2. How much did the following cost **your plant** in Baht during the fiscal year of ...?

	2000	2001	2002
a. Rent for machinery and equipment (if owned, please enter value of depreciation)	ix_2a_00	ix_2a_01	ix_2a_02
b. Rent for land and/or buildings (if owned, please enter value of depreciation)	ix_2b_00	ix_2b_01	ix_2b_02
c. Telecommunication costs (telephone, postal serv., etc)	ix_2c_00	ix_2c_01	ix_2c_02
d. Traveling (for employees)	ix_2d_00	ix_2d_01	ix_2d_02
e. Royalty or license fee to domestic companies	ix_2e_00	ix_2e_01	ix_2e_02
f. Royalty or license fee to foreign owned companies	ix_2f_00	ix_2f_01	ix_2f_02
g. Leasing	ix_2g_00	ix_2g_01	ix_2g_02

IX.3. How much did **your plant** pay for the following taxes in the fiscal year? (Baht)

	2000	2001	2002
a. Corporate tax	ix_3a_00	ix_3a_01	ix_3a_02
b. Import duties on materials and components	ix_3b_00	ix_3b_01	ix_3b_02
c. Import duties on capital goods	ix_3c_00	ix_3c_01	ix_3c_02
d. Sales tax	ix_3d_00	ix_3d_01	ix_3d_02
e. Excise tax	ix_3e_00	ix_3e_01	ix_3e_02
f. Contributions/donations	ix_3f_00	ix_3f_01	ix_3f_02
g. Local authority taxes (eg. assessment tax, quit rent etc)	ix_3g_00	ix_3g_01	ix_3g_02
h. Other direct taxes	ix_3h_00	ix_3h_01	ix_3h_02
i. Other indirect taxes (i.e. taxes on transactions)	ix_3i_00	ix_3i_01	ix_3i_02

IX.4. What was the share of the following modes of transport in your annual transport costs for year 2002?

a) Air	_____ %	ix_4a
b) Rail	_____ %	ix_4b
c) Road	_____ %	ix_4c
d) Shipping	_____ %	ix_4d
e) Other ix_4e_cau	_____ %	ix_4e
Total	100%	

IX.5.a. Did you import? ____ Yes=1 No=2 ix_5a_ch

If yes, for the latest consignment of your import, what is the breakdown of transport costs?

Total cost of last consignment (including transport costs) _____ Baht ix_5a_all

a) Cost of insurance and freight to the port of entry to Thailand _____ Baht ix_5a_a

b) Cost of insurance and freight from the port of entry to Thailand to this plant/farm _____ Baht ix_5a_b

c) Cost of air transport _____ Baht ix_5a_c

d) Cost of road transport _____ Baht ix_5a_d

e) Cost of rail transport _____ Baht ix_5a_e

f) Sea-port charges _____ Baht ix_5a_f

g) Airport charges _____ Baht ix_5a_g

IX.5.b. How much would it cost to ship a 40-foot container of your main product from your plant to

a) New York (USA) _____ Baht ix_5b_a

b) Hong Kong _____ Baht ix_5b_b

c) Rotterdam _____ Baht ix_5b_c

d) Others (please specify ix_5b_d_cau) _____ Baht ix_5b_d

IX.6. How much does electricity cost per unit.

IX.6.a. from your own generatorBaht ix_6a

IX.6.b. from publicBaht ix_6b

IX.7. Machinery & equipment:

a) What would be the cost of replacing all your machinery and equipment at the end of 2002 by acquiring new machines? __ (Baht) ix_7a

b) What is the current market value of all your machinery and equipment at the end of 2002? _____ (Baht) ix_7b

IX.8. What would be the cost of replacing all your business premises or leasehold at the end of 2002? _____ (Baht) ix_8

IX.9. What is the estimated annual market rent that **your plant** would have paid for its business premises in 2002? _____ (Baht) ix_9

IX.10. How much did your plant spend on design or R&D in 2002? [Spending includes wages and salaries of R&D personnel, such as scientists and engineers; materials, training costs, and subcontracting costs.] _____ (Baht) ix_10

IX.11. How much did **your plant** spend on additional machinery, equipment, vehicles, land and buildings in the fiscal year ...?

	2000		2001		2002	
	amount (Baht)	of which % imported	amount (Baht)	of which % imported	amount (Baht)	of which % imported
a) New machinery and equipment	ix_11a_00b	ix_11a_00pct	ix_11a_01b	ix_11a_01pct	ix_11a_02b	ix_11a_02pct
b) Second hand machinery and equipment	ix_11b_00b	ix_11b_00pct	ix_11b_01b	ix_11b_01pct	ix_11b_02b	ix_11b_02pct
c) Land and buildings and improvement in leasehold	ix_11c_00b		ix_11c_01b		ix_11c_02b	
d) New vehicles	ix_11d_00b		ix_11d_01b		ix_11d_02b	

e) Second hand vehicles.....

ix_11e_00b		ix_11e_01b		ix_11e_02b	
------------	--	------------	--	------------	--

IX.12. Did you sell any equipment or property during the fiscal year?

Value sold in Baht ...

a) Machinery and equipment

b) Land and buildings or leasehold

c) Vehicles

2000	2001	2002
ix_12a_00	ix_12a_01	ix_12a_02
ix_12b_00	ix_12b_01	ix_12b_02
ix_12c_00	ix_12c_01	ix_12c_02

IX.13 Sales and Costs			
Sales and expenses for the fiscal years of 2000, 2001 and 2002.	Value in Baht		
	2000	2001	2002
Total Production	ix_13_1_00	ix_13_1_01	ix_13_1_02
Operating Revenue	ix_13_2_00	ix_13_2_01	ix_13_2_02
Other Revenue	ix_13_3_00	ix_13_3_01	ix_13_3_02
Profit/Loss from asset exchange	ix_13_4_00	ix_13_4_01	ix_13_4_02
Interest Revenue	ix_13_5_00	ix_13_5_01	ix_13_5_02
Dividend or Profit sharing	ix_13_6_00	ix_13_6_01	ix_13_6_02
Other income	ix_13_7_00	ix_13_7_01	ix_13_7_02
Total Revenue	ix_13_8_00	ix_13_8_01	ix_13_8_02
Selling and Administration Expenditure			
Wage and Salary for director and officers	ix_13_9_00	ix_13_9_01	ix_13_9_02
Allowances, bonuses and welfare for director and officers	ix_13_10_00	ix_13_10_01	ix_13_10_02
Corporate tax	ix_13_11_00	ix_13_11_01	ix_13_11_02
Other tax	ix_13_12_00	ix_13_12_01	ix_13_12_02
Interest charges and financial fees	ix_13_13_00	ix_13_13_01	ix_13_13_02
Donation	ix_13_14_00	ix_13_14_01	ix_13_14_02
Office depreciation	ix_13_15_00	ix_13_15_01	ix_13_15_02
Transportation cost	ix_13_16_00	ix_13_16_01	ix_13_16_02
Promotion expenditure	ix_13_17_00	ix_13_17_01	ix_13_17_02
R&D expenditure	ix_13_18_00	ix_13_18_01	ix_13_18_02
Other selling and administration expenditure	ix_13_19_00	ix_13_19_01	ix_13_19_02
Total Selling and Administration Expenditure	ix_13_20_00	ix_13_20_01	ix_13_20_02
Production Cost			
Purchases of materials excluding fuel	ix_13_21_00	ix_13_21_01	ix_13_21_02
Direct material cost	ix_13_22_00	ix_13_22_01	ix_13_22_02
Purchased parts cost	ix_13_23_00	ix_13_23_01	ix_13_23_02
Work-in-process (At the beginning of period)	ix_13_24_00	ix_13_24_01	ix_13_24_02
Wage and salary for production labor	ix_13_25_00	ix_13_25_01	ix_13_25_02
Allowances, Bonuses and Welfare for production labor	ix_13_26_01	ix_13_26_02	ix_13_26_03
Factory Depreciation	ix_13_27_01	ix_13_27_02	ix_13_27_03
Electricity	ix_13_28_01	ix_13_28_02	ix_13_28_03
Fuel and other energy (Coal, Oil)	ix_13_29_01	ix_13_29_02	ix_13_29_03
Subcontracting cost	ix_13_30_01	ix_13_30_02	ix_13_30_03

Rent (buildings and machines)	ix_13_31_01	ix_13_31_02	ix_13_31_03
Maintenance expenditure	ix_13_32_01	ix_13_32_02	ix_13_32_03
Other production cost	ix_13_33_01	ix_13_33_02	ix_13_33_03
<u>Exclude</u> work-in-process (At the end of period)	ix_13_34_01	ix_13_34_02	ix_13_34_03
Extraordinary item for manufacturing cost reduction	ix_13_35_01	ix_13_35_02	ix_13_35_03
Total Production Cost	ix_13_36_01	ix_13_36_02	ix_13_36_03
Inventory at the beginning of period	ix_13_37_01	ix_13_37_02	ix_13_37_03
Copyright	ix_13_38_01	ix_13_38_02	ix_13_38_03
Purchased Goods	ix_13_39_01	ix_13_39_02	ix_13_39_03
<u>Exclude</u> Inventory at the end of period	ix_13_40_01	ix_13_40_02	ix_13_40_03
Extraordinary item for cost of good sold reduction	ix_13_41_01	ix_13_41_02	ix_13_41_03
Total Cost of Goods Sold	ix_13_42_01	ix_13_42_02	ix_13_42_03

IX.14. Asset, Liabilities and Equity

	Value in Baht as of end of the fiscal year of		
	2000	2001	2002
Inventory : Finished Goods	ix_14_1_01	ix_14_1_02	ix_14_1_03
: Work-in-process	ix_14_2_01	ix_14_2_02	ix_14_2_03
: Raw material (exclude fuel)	ix_14_3_01	ix_14_3_02	ix_14_3_03
: Fuel	ix_14_4_01	ix_14_4_02	ix_14_4_03
Accounts receivable and notes	ix_14_5_01	ix_14_5_02	ix_14_5_03
Cash and deposits	ix_14_6_01	ix_14_6_02	ix_14_6_03
Other current asset	ix_14_7_01	ix_14_7_02	ix_14_7_03
Investment in other company or stock market	ix_14_8_01	ix_14_8_02	ix_14_8_03
Fixed Asset			
Initial price : Machinery and equipment (include transportation cost)	ix_14_9_01	ix_14_9_02	ix_14_9_03
: Land and development, buildings	ix_14_10_01	ix_14_10_02	ix_14_10_03
Book price : Machinery and equipment	ix_14_11_01	ix_14_11_02	ix_14_11_03
: Land and development	ix_14_12_01	ix_14_12_02	ix_14_12_03
: Buildings	ix_14_13_01	ix_14_13_02	ix_14_13_03
: other fixed asset	ix_14_14_01	ix_14_14_02	ix_14_14_03
Pre-operating buildings and machinery	ix_14_15_01	ix_14_15_02	ix_14_15_03
Guarantee (for electricity usage)	ix_14_16_01	ix_14_16_02	ix_14_16_03
Total Asset	ix_14_17_01	ix_14_17_02	ix_14_17_03
Long-term liabilities (i.e., more than one year)	ix_14_18_01	ix_14_18_02	ix_14_18_03
Long term loan	ix_14_19_01	ix_14_19_02	ix_14_19_03
Loan from ownership	ix_14_20_01	ix_14_20_02	ix_14_20_03
Other long-term liabilities	ix_14_21_01	ix_14_21_02	ix_14_21_03
Short-term liabilities (i.e. one year or less)	ix_14_22_01	ix_14_22_02	ix_14_22_03
Accounts payable	ix_14_23_01	ix_14_23_02	ix_14_23_03
Other short-term liabilities	ix_14_24_01	ix_14_24_02	ix_14_24_03

Total liabilities	ix_14_25_01	ix_14_25_02	ix_14_25_03
Share capital (Equity)	ix_14_26_01	ix_14_26_02	ix_14_26_03
Surplus	ix_14_27_01	ix_14_27_02	ix_14_27_03
Retained earning	ix_14_28_01	ix_14_28_02	ix_14_28_03
Total Liabilities and Equity	ix_14_29_01	ix_14_29_02	ix_14_29_03

(Note: Total Assets must equal Total Liabilities)

	Value in Baht as of end of the fiscal year of		
	2000	2001	2002
IX.14.a. The amount of total long-term liabilities that are Foreign currency	ix_14_30_01	ix_14_30_02	ix_14_30_03
IX.14.b. The amount of total short-term liabilities that are Foreign currency	ix_14_31_01	ix_14_31_02	ix_14_31_03
Of which: payables	ix_14_32_01	ix_14_32_02	ix_14_32_03

Income Statement			
IX.15.	Value in Baht as of end of the fiscal year of		
	2000	2001	2002
Gross Profit	ix_15_1_01	ix_15_1_02	ix_15_1_03
Net profit (Loss)	ix_15_2_01	ix_15_2_02	ix_15_2_03
Earning per share (EPS)	ix_15_3_01	ix_15_3_02	ix_15_3_03
Retained earning from the beginning of period	ix_15_4_01	ix_15_4_02	ix_15_4_03
Accumulated Results from change in account basis	ix_15_5_01	ix_15_5_02	ix_15_5_03
Dividend	ix_15_6_01	ix_15_6_02	ix_15_6_03
Bonuses for executive	ix_15_7_01	ix_15_7_02	ix_15_7_03
Legal reserve	ix_15_8_01	ix_15_8_02	ix_15_8_03
Retained earning at the end of period	ix_15_9_01	ix_15_9_02	ix_15_9_03

IX.16. In how many banks do you have an account? ____ ix_16

IX.17. Do you have a term loan from a bank or financial institution? ix_17

1. Yes (skip to IX.19)
2. No

IX.18. What is the reason that you have no term loan from a bank or financial institution? ____ ix_18_1

1. Never applied for a bank loan, because.....
 - (1) Do not need term loans ix_18_1_1
 - (2) Application procedures for bank term loans are too cumbersome ix_18_1_2
 - (3) Collateral requirements of bank term loans are too stringent ix_18_1_3
 - (4) Interest rates are too high ix_18_1_4
 - (5) Corruption in the allocation of bank credit ix_18_1_5
 - (6) Others (specify) ix_18_1_6_cau..... ix_18_1_6

2. Application for (a) bank term loan(s) was turned down, because ix_18_2

- (1) lack of collateral
- (2) incompleteness of application
- (3) perceived lack of feasibility of project
- (4) others ...(specify) ix_18_2_cau

IX. 19. How long has your firm been doing business with your primary bank? ____ (months) ix_19

IX.20. Do you have a bank overdraft facility? ix_20

1. Yes
2. No (skip to IX.21)

IX.21. What percentage of your overdraft facility did you use in 2002? ____% ix_21

IX.22. What share of your outstanding credit is due in:

less than a year	____%	ix_22_1
more than a year	____%	ix_22_2
	100%	

IX.23. Please identify the percentage of your establishment's financing from each of the following sources for:

i) **Working capital**

ii) **New Investments**

	Working Capital	New Investments
1. Internal funds or Retained earnings	ix_23_1wc	ix_23_1ni
2. Local commercial banks (loan, overdraft)	ix_23_2wc	ix_23_2ni
3. Foreign owned commercial banks	ix_23_3wc	ix_23_3ni
4. Leasing arrangement	ix_23_4wc	ix_23_4ni
5. Investment Funds/Special Development Financing	ix_23_5wc	ix_23_5ni
6. Trade credit (supplier or customer credit)	ix_23_6wc	ix_23_6ni
7. Equity, sale of stock	ix_23_7wc	ix_23_7ni
8. Family, friends	ix_23_8wc	ix_23_8ni
9. Informal sources (e.g. unlicensed money lender)	ix_23_9wc	ix_23_9ni
10. Others (specify): ____ ix_23_10_cau	ix_23_10wc	ix_23_10ni
TOTAL	100%	100%

IX.24. Has your plant taken any loan during the last 3 years? ix_24

1. Yes
2. No (skip to IX.26)

IX.24.a. what type of the most recent loan of your plant? ix_24a

- | | | |
|--------------|--------------|----------|
| 1. Term loan | 2. Overdraft | 3. Other |
|--------------|--------------|----------|

IX.25. What term of the last loan? 1. *Less than 1 year* 2. *1-5 years* 3. *Over 5 years* ix_25

IX.26. What is the amount of the last loan/overdraft? ___ Baht ix_26

IX.27. In what year was this loan/overdraft approved? ___ ix_27

IX.28. Are externally audited financial statements required to obtain bank credit? ____ Yes=1 No=2 ix_28

IX.29. Does your firm provide collateral to obtain a bank credit? ____ Yes=1 No=2 ix_29

IX.30. In your experience how frequently do Banks accept the following forms of collateral

Type of Collateral	Never	<u>Sometimes</u>	<u>Always</u>	
a) Land	0	1	2	ix_30_1
b) Buildings	0	1	2	ix_30_2
c) Machinery and equipment (NEW)	0	1	2	ix_30_3
d) Machinery & Equipment (USED)	0	1	2	ix_30_4
e) Firm equity	0	1	2	ix_30_5
f) Trade credit / accounts receivables	0	1	2	ix_30_6
g) Others, specify: ix_30_7_cau	0	1	2	ix_30_7

IX.31. What was the approximate value of collateral required as a percentage of the loan value? ___% ix_31

IX.32. What is the average interest rate for each category of your plant's liabilities?

	Domestic	Foreign
Short term liabilities	ix_32_s1	ix_32_s2
Long term liabilities	ix_32_l1	ix_32_l2

IX.33. How long does it take to clear the following payments through your financial institution?

	Days	Charge (% of transaction)
a) a cheque	ix_33_a1	ix_33_a2
b) a domestic currency transfer	ix_33_b1	ix_33_b2
c) a foreign currency transfer	ix_33_c1	ix_33_c2

IX.34. Does your establishment have its annual financial statement reviewed by a certified external auditor? ____ Yes=1 No=2 ix_34

IX.35. Your fiscal year ended on (Date and month) ix_35

PRODUCTIVITY AND INVESTMENT CLIMATE STUDY THAILAND (PICS-2004)

Manufacturing Sector Survey Questionnaire

Part II-B *(To be administered to the Personnel Manager/CAO)*

About the survey

The Foundation for the Thailand Productivity Institute (FTPI) has been given the responsibility to conduct a productivity and Investment Climate Survey (PICS) with the assistance of the World Bank. This work is conducted under the supervision of the National Economic and Social Development Board (NESDB), and its results will support Thailand's initiative to improve productivity and competitiveness of firms operating in Thailand.

The Productivity and Investment Climate Survey is a collaborative effort of the Thailand Government and the World Bank. Similar surveys are being carried out in several other countries. Parts of the survey questionnaire can be filled out by your staff working from your records; other parts should be answered by the owner or plant manager. A team of enumerators will visit your plant to go through the questionnaire with you or your staff. **Only aggregate or average information from a large sample of firms will be published and we guarantee confidentiality for all individual responses.**

The general purpose of the survey is to understand the investment climate in Thailand and how it affects business performance, with the objective to improve it. We will provide you with a summary report that will be directly useful to you in that it will enable you to benchmark your business and your industry against domestic and international competitors. The survey will also provide useful information about the investment climate in Thailand in the international context. The World Bank's experience in a wide range of countries shows that this information can be crucial for improving the investment climate so that businesses and workers can prosper.

The questionnaire begins with items about the origin and shareholding status of a business, including questions about the background of the owner or manager. This information is useful to determine if and how the interaction between investment climate and business performance varies by business types (foreign versus domestic, or new versus experienced). It then proceeds to issues of finance (to examine financial constraints on business and expansion), technology (to assess the ease of access to new technologies), relationship with other firms (to gauge the importance of associations and networks), government regulation, contract enforcement, labor relations and international trade. What will eventually emerge is a comprehensive picture of the environment in which businesses are operating in Thailand, both their strengths and weaknesses.

Your cooperation in ensuring the success of this survey is very much appreciated.

To Enumerators:

For precision of statements, the acronym "KE"-for a fictional business, Khon-Kaen Electronics- appears in places where the name of the participating business should be. Similarly "Electronics" appears where the sector of activity of the business should be.

ESTABLISHMENT NAME:

Address:

INDUSTRY CODE ____ items
subitems

1. Food Processing
 - 1.1 Canned Food
 - 1.2 Frozen Food
 - 1.3 Sugar
2. Textile
 - 2.1 Yarn
 - 2.2 Clothe
3. Clothing
 - 3.1 Clothing for men, women and child

ESTABLISHMENT NO. ____ id_pics

ISIC Code: ____ isic

4. Automotive Parts
 - 4.1 Automotive parts
5. Electronics & Electrical Appliances
 - 5.1 Electronics Products
 - 5.2 Electronics Parts
 - 5.3 Household Electrical Appliances
6. Rubber and Plastics
 - 6.1 Plastic Packaging
 - 6.2 Household Plastic Products
 - 6.3 Rubber

7. Wood products and Furniture
 - 7.1 Wood Furniture
8. Machinery and Equipment
 - 8.1 Machinery

REGION CODE ____ code_fac

8. North
9. Central
10. Bangkok and Vicinity

4. East
5. Northeast

6. South

Province: province_code

City Codes:

Name of Enumerator:

Name of Respondance:

Current Position:

Phone number:

Interview Date:

Start Time:

Finish time:

Enumeration validated by (Inspector):

Date/Time:

City Name:

Email:

Fax Number:

**SECTION X:
LABOR AND HUMAN RESOURCES**

Please use the following definitions in this section.

<i>Management:</i>	Persons making management decisions (exclude supervisors).
<i>Professionals:</i>	Trained and certified specialists outside of management such as engineers, accountants, lawyers, chemists, scientists, software programmers. Generally, Professionals hold a University-level degree.
<i>Skilled Production worker:</i>	Skilled Production workers are technicians involved directly in the production process or at a supervisory level and whom management considers to be skilled.
<i>Unskilled Production worker:</i>	Persons involved in production process whom management considers to be unskilled.
<i>Non-Production worker:</i>	Support, administrative, sales workers not included in management or among professionals.
<i>Temporary workers:</i>	All (paid) short term(i.e. for less than a year) employees with no guarantee of renewal of employment contract (include part-time workers)
<i>Permanent workers:</i>	All paid workers that are not temporary.
<i>Out sourced / contract workers:</i>	All workers engaged through labour supplier.

Part A. Employment Dynamics

X.1. How many workers in total were employed in this **establishment** at the end of: (-888 = do not know)

	2001	2002	2003
Permanent workers in plant	x_1_1_01	x_1_1_02	x_1_1_03
Temporary workers in plant	x_1_2_01	x_1_2_02	x_1_2_03
Permanent worker in office	x_1_3_01	x_1_3_02	x_1_3_03
Temporary worker in office	x_1_4_01	x_1_4_02	x_1_4_03
Management	x_1_5_01	x_1_5_02	x_1_5_03
Total	x_1_6_01	x_1_6_02	x_1_6_03

X.2. What kind of work shift did [KE] follow in the following years?

	2001	2002	2003
	x_2_01	x_2_02	x_2_03
1. Single shift			
2. Double shift			
3. Triple shift			
4. Others			

X.3. How many days did your plant operate in year 2002? ____ days x_3_02

How many days did your plant operate in year 2003? ____ days x_3_03

X.4. Out of a 8-hour working day, how many hours is the typical production worker working at present? ____ hours x_4

X.5. Are any of your employees members of a trade union? _____ x_5

1. Yes

2. No (skip to X.6)

X.5.a. What percentage of your plant's employees belong to a trade union? ____% x_5a

X.6. During the last 2 years (2002-2003), Have you had any labor disputes concerning any of the following?

a) pay _ Yes=1 No=2 x_6a

- b) redundancy _____ Yes=1 No=2 x_6b
c) social security _____ Yes=1 No=2 x_6c
d) others (specify) x_6d cau _____ Yes=1 No=2 x_6d

X.7. Approximately how many man-days, if any, did you lose in year 2003 due to the following? (Please put zero if you did not lose any)

- | | | | |
|----|----------------------------|-------|------|
| a) | Strikes | _____ | x_7a |
| b) | Other Stoppages | _____ | x_7b |
| c) | Worker slowdowns | _____ | x_7c |
| d) | Worker absenteeism | _____ | x_7d |
| e) | Alcoholism | _____ | x_7e |
| f) | Drug abuse | _____ | x_7f |
| g) | Reported sickness | _____ | x_7g |
| h) | Other labor related causes | _____ | x_7h |
| i) | Civil unrest | _____ | x_7i |
| j) | Other (specify) x_7j_cau | _____ | x_7j |

X.8. The following table refers only to permanent workers of your plant (-888 = *do not know*)

	Management	Professionals	Skilled Production Workers	Unskilled Production Workers	Non-Production Workers	Total
Number of workers at the end of the fiscal year of 2001	x_8_11	x_8_12	x_8_13	x_8_14	x_8_15	x_8_16
Number of workers at the end of the fiscal year of 2002	x_8_21	x_8_22	x_8_23	x_8_24	x_8_25	x_8_26
Number of workers at the end of the fiscal year of 2003	x_8_31	x_8_32	x_8_33	x_8_34	x_8_35	x_8_36
of which Female	x_8_41	x_8_42	x_8_43	x_8_44	x_8_45	x_8_46
How many new employees did you hire in 2003?	x_8_51	x_8_52	x_8_53	x_8_54	x_8_55	x_8_56
How many employees retired in 2003?	x_8_61	x_8_62	x_8_63	x_8_64	x_8_65	x_8_66
How many employees were dismissed or laid off in 2003?	x_8_71	x_8_72	x_8_73	x_8_74	x_8_75	x_8_76
How many employees resigned in 2003?	x_8_81	x_8_82	x_8_83	x_8_84	x_8_85	x_8_86

X.9. How many employees left for other reasons 2003? _____ x_9 (-888 = do not know)

X.10. What percent of your permanent **skilled workers** are foreign nationals? _____% x 10

X.11. What percent of your **unskilled workers** are foreign nationals? _____% x 11

X.12. What percent of the senior management is male? _____% x_12

X.13. How many vacancies did you have in the following categories of workers? (-888 = do not know)

	Management	Professionals	Skilled Production Workers	Unskilled Production Workers	Non-Production Workers	Total
Vacancies at the end of the fiscal year of 2001	x_13_11	x_13_12	x_13_13	x_13_14	x_13_15	x_13_16
Vacancies at the end of the fiscal year of 2002	x_13_21	x_13_22	x_13_23	x_13_24	x_13_25	x_13_26
Vacancies at the end of the fiscal year of 2003	x_13_31	x_13_32	x_13_33	x_13_34	x_13_35	x_13_36

X.14. What is the remuneration cost to **your plant** of the year 2002-2003 by the indicated group of *permanent* workers (values in Baht)

remuneration cost in 2002	Management	Professionals	Skilled Production Workers	Unskilled Production Workers	Non-Production Workers	Total
Total Wages and Salaries.....	x_14_11	x_14_12	x_14_13	x_14_14	x_14_15	x_14_16
Of which over-time pay ...	x_14_21	x_14_22	x_14_23	x_14_24	x_14_25	x_14_26
Bonuses	x_14_31	x_14_32	x_14_33	x_14_34	x_14_35	x_14_36
Other benefits (social security*, education, food, transport, etc.) ..	x_14_41	x_14_42	x_14_43	x_14_44	x_14_45	x_14_46
Total compensation	x_14_51	x_14_52	x_14_53	x_14_54	x_14_55	x_14_56

* i.e. pensions, provident fund, medical insurance and unemployment insurance.

remuneration cost in 2003	Management	Professionals	Skilled Production Workers	Unskilled Production Workers	Non-Production Workers	Total
Total Wages and Salaries.....	x_14_61	x_14_62	x_14_63	x_14_64	x_14_65	x_14_66
Of which over-time pay	x_14_71	x_14_72	x_14_73	x_14_74	x_14_75	x_14_76
Bonuses	x_14_81	x_14_82	x_14_83	x_14_84	x_14_85	x_14_86
Other benefits (social security*, education, food, transport, etc.) ..	x_14_91	x_14_92	x_14_93	x_14_94	x_14_95	x_14_96
Total compensation	x_14_101	x_14_102	x_14_103	x_14_104	x_14_105	x_14_106

X.14.a. The following table refers only to **temporary workers** employed by your plant
(If your plant does not employ temporary staff, then skip this table)

	Skilled Production Workers	Unskilled Production Workers	Non-Production Workers	Total
Number of workers at the end of the fiscal year of 2001.....	x_14a_11	x_14a_12	x_14a_13	x_14a_14
Number of workers at the end of the fiscal year of 2002.....	x_14a_21	x_14a_22	x_14a_23	x_14a_24
Number of workers at the end of the fiscal year of 2003.....	x_14a_31	x_14a_32	x_14a_33	x_14a_34
of which Female	x_14a_41	x_14a_42	x_14a_43	x_14a_44
Average number of days worked	x_14a_51	x_14a_52	x_14a_53	x_14a_54
Total Wages and Salaries in 2002.	x_14a_61	x_14a_62	x_14a_63	x_14a_64
Other fringe benefits** in 2002.	x_14a_71	x_14a_72	x_14a_73	x_14a_74
Total compensation in 2002.	x_14a_81	x_14a_82	x_14a_83	x_14a_84
Total Wages and Salaries in 2003.	x_14a_91	x_14a_92	x_14a_93	x_14a_94
Other fringe benefits** in 2003.	x_14a_101	x_14a_102	x_14a_103	x_14a_104
Total compensation in 2003.	x_14a_111	x_14a_112	x_14a_113	x_14a_114

***including housing, education, food and transport.*

X.14.b. Does your firm employ outsource/contract workers? Yes=1 No=2 x_14b_ch

The following table refers only to **outsourced/contract workers** employed by your plant
(If your plant does not employ outsourced/contract staff, then skip this table)

(-888 = do not know)

	Skilled Production Workers	Unskilled Production Workers	Non-Production Workers	Total
Number of workers at the end of the fiscal year of 2002	x_14b_11	x_14b_12	x_14b_13	x_14b_14
Number of workers at the end of the fiscal year of 2003	x_14b_21	x_14b_22	x_14b_23	x_14b_24
Total compensation in 2002	x_14b_31	x_14b_32	x_14b_33	x_14b_34
Total compensation in 2003	x_14b_41	x_14b_42	x_14b_43	x_14b_44

X.15. Do you pay any of your workers on a piece rate basis? ____ Yes=1 No=2 x_15

Part B. Human Capital Stock and Acquisition

X.16. For **permanent workers** employed at the end of the year 2003, please give an estimate for the following:

	Management	Professionals (Engineers/ Accountants)	Skilled Production Workers	Unskilled Production Workers	Non-Production Workers
Average number of years of education	x_16_11	x_16_12	x_16_13	x_16_14	x_16_15
Average tenure (in years)	x_16_21	x_16_22	x_16_23	x_16_24	x_16_25
Average Age	x_16_31	x_16_32	x_16_33	x_16_34	x_16_35

X.17. How many persons with university degree did your plant employ full time as at the end of 2003?

1. Trained locally ____ ____ (number) x_17_1
2. Trained abroad ____ ____ (number) x_17_2
3. Expatriates ____ ____ (number) x_17_3
- Total ____ ____ (number) x_17_3to

X.18. How many university graduates in total did your plant recruit in 2003?

1. Trained locally ____ ____ (number) x_18_1
2. Trained abroad ____ ____ (number) x_18_2
3. Expatriates ____ ____ (number) x_18_3
4. Total ____ ____ (number) x_18_3_to
- 5.

X.19. How many persons in your firm work as:

1. Engineers ____ ____ x_19_1
2. Scientists ____ ____ x_19_2
3. Research staff ____ ____ x_19_3
4. Analysis staff ____ ____ x_19_4
5. Information Technician ____ ____ x_19_5

X.19.a. What percent of the workforce at your establishment have the following education levels?

- c. Less than 6 years ("some elementary") x_19a1 ____ % Of which female x_19a2 ____ %
- d. 6-12 years ("some secondary") x_19b1 ____ % Of which female x_19b2 ____ %
- e. More than 12 years (some university of higher) x_19c1 ____ % Of which female x_19c2 ____ %

Part C. Formal In- house Training (*in a training room setting*)

X.20. Did **your plant** run formal in-house training programs for its employees in 2003? x_20

1. Yes
2. No (*skip to PART D*)

X.20.a. Please give the following information on the programs:

	Management	Professionals (Engineers/ Accountants)	Skilled Production Workers	Unskilled Production Workers	Non-production workers
How many people were trained in these programs?	x_20a1	x_20a2	x_20a3	x_20a4	x_20a5

X.21. In 2003, what was the source of formal in-house training? (%)

- | | | |
|---|-------|--------|
| 1. Dedicated internal trainers | ____% | x_21_1 |
| 2. Managers (part-time) | ____% | x_21_2 |
| 3. Supervisors / foremen | ____% | x_21_3 |
| 4. Suppliers, buyers, business partners | ____% | x_21_4 |
| 5. Training consultants | ____% | x_21_5 |
| 6. Donors, NGOs | ____% | x_21_6 |
| 7. Government institution | ____% | x_21_7 |
| 8. Others (specify) x_21_8_cau | ____% | x_21_8 |
| Total | 100% | |

X.22. In 2003, what was the content of the training ? (%)

- | | | |
|--------------------------------------|-------|--------|
| 1. Production technologies | ____% | x_22_1 |
| 2. Marketing | ____% | x_22_2 |
| 3. Information technology | ____% | x_22_3 |
| 4. Management / quality technologies | ____% | x_22_4 |
| 5. Intellectual property | ____% | x_22_5 |
| 6. Safety procedures | ____% | x_22_6 |
| 7. Language skills | ____% | x_22_7 |
| Others (specify x_22_8_cau | ____% | x_22_8 |
| Total | 100% | |

Part D. Formal Outside Training

X.23. Did your plant send employees to formal training programs run by other organizations during the fiscal year of 2003? x_23

1. Yes

2. No (skip to X.27.)

X.23.a. Can you please indicate the number of workers trained in each of the following main institutes?

	Management	Professionals	Skilled Production Workers	Unskilled Production Workers	Non-production workers
Thailand Productivity Institute (FTPI)	x_23a11	x_23a12	x_23a13	x_23a14	x_23a15
Thailand Management Association (TMA)	x_23a21	x_23a22	x_23a23	x_23a24	x_23a25
Government University	x_23a31	x_23a32	x_23a33	x_23a34	x_23a35
Private University	x_23a41	x_23a42	x_23a43	x_23a44	x_23a45
Department of Skill Development	x_23a51	x_23a52	x_23a53	x_23a54	x_23a55
The Federation of Thai Industries (FTI)	x_23a61	x_23a62	x_23a63	x_23a64	x_23a65
Technology Promotion Association (Thailand-Japan)	x_23a71	x_23a72	x_23a73	x_23a74	x_23a75
Others (specify) ... x_23a8_cau	x_23a81	x_23a82	x_23a83	x_23a84	x_23a85
Total	x_23a91	x_23a92	x_23a93	x_23a94	x_23a95

X.24. In summary, for 2003, what were the main sources of formal outside training? (%)

- | | | |
|---------------------------------|------|--------|
| 1. University | ___% | x_24_1 |
| 2. Joint-venture Partners | ___% | x_24_2 |
| 3. Government institutes | ___% | x_24_3 |
| 4. Private training schools | ___% | x_24_4 |
| 5. Vocational/technical schools | ___% | x_24_5 |
| 6. Others (specify) x_24_6_cau | ___% | x_24_6 |
| Total | 100% | |

X.25. In 2003, what was the content of the training ? (%)

- | | | |
|--------------------------------------|------|--------|
| 1. Production technologies | ___% | x_25_1 |
| 2. Marketing | ___% | x_25_2 |
| 3. Information technology | ___% | x_25_3 |
| 4. Management / quality technologies | ___% | x_25_4 |
| 5. Intellectual property | ___% | x_25_5 |
| 6. Safety procedures | ___% | x_25_6 |
| 7. Language skills | ___% | x_25_7 |
| Other (specify) x_25_8_cau | ___% | x_25_8 |
| Total | 100% | |

X.26. How much did your firm spend on outside training in 2003? _____ Baht x_26

X.27. How many of the employees that participated in training (both in-house and outside) were promoted in 2003 following training? ____
(number) x_27

X.28. How many of the employees that participated in training (both in-house and outside) had pay increases in 2003 as a result of the training?
_____ (number) x_28

X.29. How many of the employees that participated in training (both in-house and outside) left your plant in 2003 after the training? ____ (number)
x_29
(-888 = do not know)

X.30. Did the employees share the cost of training in 2003? ____ Code: Yes=1 No=2 x_30

X.31. How many weeks of training does it take for a newly hired production worker to be fully operational? ____ (weeks) x_31