

Attachment C

Survey Questionnaire

This Attachment consists of the survey instrument as it was distributed to the 3,757 firms in the database compiled by PE Research.

In retrospect, both questions 7 and 10 should have been worded “your company to employ/will spend...*in* the year 2000?” The wording “...*by* the year 2000?” apparently led some respondents to provide a cumulative number rather than the desired number for a single year, necessitating that the more likely response to what was desired had to be imputed.

In addition, even though firms indicated in question 5 that they had no current need for additional scientists, engineers, or technicians, they should have been directed to skip only to question 7 and been given the opportunity to indicate any increased needs that they anticipated by the year 2000.

Anyone who desires to replicate such a survey using this instrument is invited to contact members of the study team at SRI International to discuss suggested instrument modifications based on our experience with it to date.

CONFIDENTIAL

Code #

**SURVEY OF EMPLOYMENT OF SCIENTISTS,
ENGINEERS, AND TECHNICIANS IN MALAYSIA**

Λ Some of the questions below ask for numbers. Please provide your *best estimate* if you do not know the exact number. An estimate is more useful to us than no answer at all.

1. In total, how many employees does your company currently employ in Malaysia? (Please include full-time, part-time, and temporary or contract employees.)

Total number of employees: _____

2. What is the primary industry or business activity of your company?

(PLEASE CIRCLE ONE NUMBER.)

<u>Industry Description</u>		<u>Industry Description</u>
Manufacturing	15	Machinery Manufacturing
1 Food Processing	16	Office, Computing, and Accounting Machines
2 Beverages and Tobacco	17	Electrical, Electronic, or Communications Products
3 Textile & Textile Products	18	Motor Vehicles & Motor Vehicle Equipment
4 Leather & Leather Products	19	Other Transportation Equipment
5 Wood & Wood Products	20	Other Manufacturing (please specify):
6 Furniture & Fixtures		_____
7 Paper, Printing, & Publishing		Non-manufacturing
8 Chemicals & Chemical Products (include drugs)	21	Health Services
9 Petroleum & Coal	22	Mining (metal, coal, nonmetal)
10 Rubber Products	23	Building Construction
11 Plastic Products	24	Other (please specify (include plantations):
12 Non-metallic Mineral Products		_____
13 Basic Metal Products		_____
14 Fabricated Metal Products		

3. Does your firm currently employ any scientists, engineers, or technicians in Malaysia?
(Please see the definitions below if you are uncertain.)
(PLEASE CIRCLE ONE NUMBER)

Yes..... 1 **Λ** *Please continue to the next page.*

No..... 2 **Λ** *Please stop here and return this questionnaire in the enclosed postage-paid envelope: your response is extremely important.*

DEFINITIONS:

By "scientists or engineers," we mean all persons engaged in scientific or engineering work at a level that requires a knowledge of *physical sciences, life sciences, mathematics, computer science, or engineering* that is *equivalent* at least to that acquired through completion of a university degree with a major in these fields, *regardless* of whether they actually hold a degree in the field.

By "technicians," we mean persons who assist physical or life scientists or engineers in *laboratory or production* activities. Such positions require knowledge usually obtained by formal training beyond the high school level, but below that of a university degree.

4. How many scientists, engineers, and/or technicians does your company *currently* employ in Malaysia? (Please include full-time, part-time, and temporary or contract employees.)

Total number of scientists _____; Percent foreign nationals: _____

Total number of engineers _____; Percent foreign nationals: _____

Total number of technicians _____; Percent foreign nationals: _____

5. *If qualified job candidates were available*, would your company hire *additional* scientists, engineers, or technicians *now* (that is, would you immediately increase the number of scientists, engineers, or technicians that your company employs in Malaysia)?

(PLEASE CIRCLE YOUR *BEST ESTIMATE*)

Yes, probably 1 **Λ** *Please continue*

No, probably not 2 **Λ** *Please skip to question 8*

6. *If qualified job candidates were available*, how many scientists, engineers, or technicians would your company probably hire immediately?
(PLEASE GIVE YOUR **BEST ESTIMATE**; IF NONE, ENTER "0")

Number of scientists we would hire: _____

Number of engineers we would hire: _____

Number of technicians we would hire: _____

7. How many scientists, engineers, or technicians do you expect your company to employ by the year 2000?

Number of scientists: _____

Number of engineers: _____

Number of technicians: _____

8. Of the scientists, engineers, and technicians that your Institute employs in Malaysia, how many are *primarily* engaged in research and development (R&D)?

DEFINITION: By "R&D," we mean basic and applied research in the physical or life sciences or engineering *and* design or development of prototype products or processes, including the development of product-related software. *Do not* include routine product testing, market research, quality control activities, or software development related to internal Institute needs, such as accounting systems or management information systems.

Number of scientists engaged in R&D: _____

Number of engineers engaged in R&D: _____

Number of technicians engaged in R&D: _____

9. Approximately how much did your company spend on *in-house* R&D conducted in Malaysia during the most recently completed accounting year?

Total in-house R&D expenditures: RM _____.

Percent of annual total revenue (turnover): RM _____.

10. Approximately how much do you think that your company will spend on *in-house* R&D conducted in Malaysia by the year 2000?

Total in-house R&D expenditures: RM _____.

11. How much is your Institute affected by the availability of qualified scientist, engineer, and technician job candidates, both **near-term** (next two years) and for the **future**?
(PLEASE CHECK ONE BOX IN THE "Near-term" LINE AND ONE BOX IN THE "Future" LINE, USING YOUR BEST ESTIMATE)

Not at all Some A great deal

Near-term

Future

12. Would you like to receive a summary of the survey results?
(PLEASE CIRCLE ONE NUMBER): Yes 1

No 2

Please provide the following information:

Your name: _____

Title: _____

Telephone number: _____

Company: _____

Parent company, if any: _____

Organizational unit for which data have been provided, if other than entire

company: _____

COMMENTS OR ADDITIONAL INFORMATION: _____

Thank you very much for your participation.

Please return this completed questionnaire in the postage paid envelope to:

Ministry of Science, Technology, and the Environment

Peti Surat 13460

50810 Kuala Lumpur

or fax this form to the Ministry at (03) 704 2863.