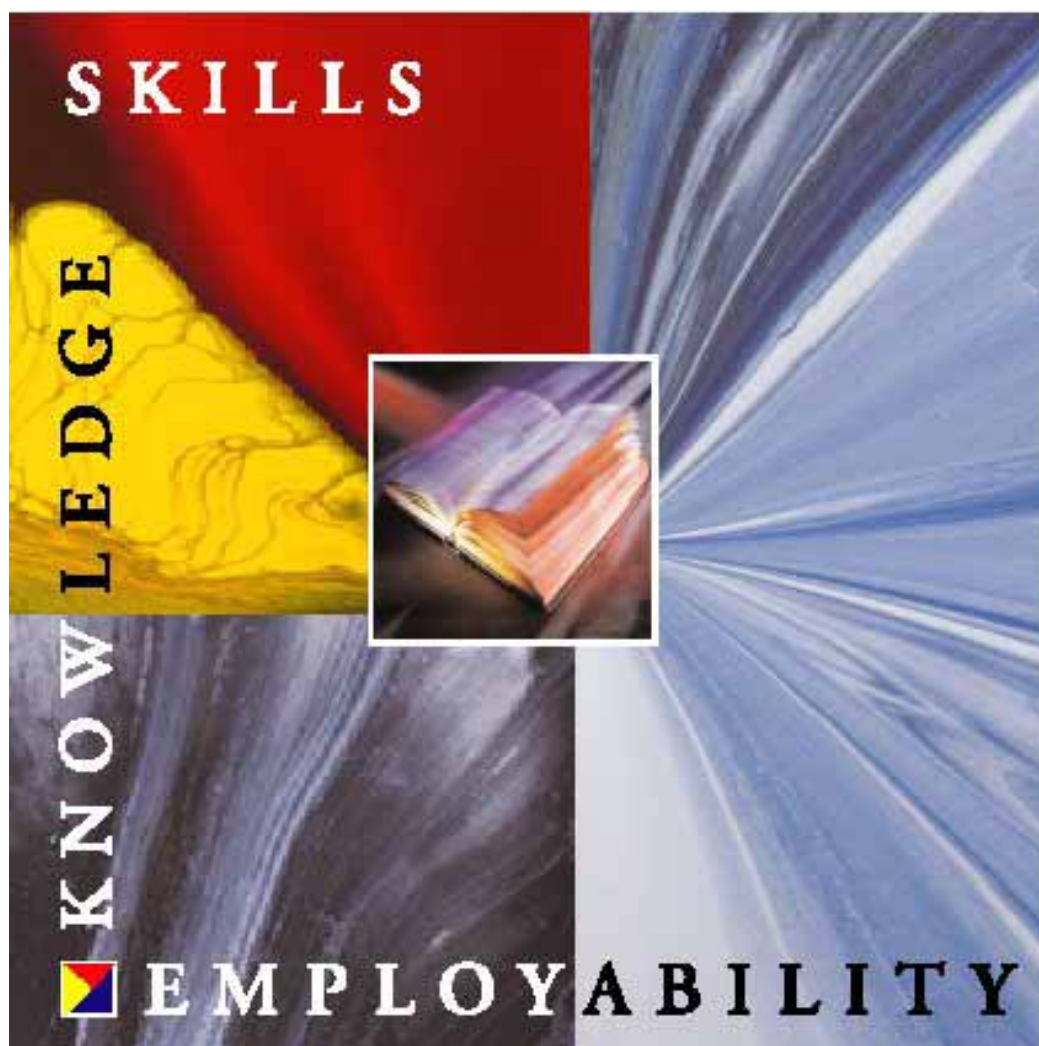


***Statistics on Investment in Training:
an assessment of their availability***

by

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**InFocus Programme on Skills, Knowledge,
and Employability**

Foreword

The present report on the availability of statistics on investment in training is part of our work activities towards the development of a database on participation and expenditures on vocational education and training as demanded by our Constituents meeting at the General Conference of the ILO in June 2000. As concluded during the General discussion concerning human resources training and development at the ILC 2000, the establishment of a measurable and comparative basis towards which countries, sectors and companies can all endeavour to develop benchmarks is one means of encouraging countries and companies to increase current efforts to invest in training.

The lack of comparable information and statistics on participation and expenditures on vocational education and training, particularly in developing countries, is a major obstacle to the ILO work and the IFP/SKILLS aim at promoting more and better investment in training and skills development to provide men and women improved and equal access to decent jobs, as well as to our constituents to monitor progress both in achieving identified targets and in implementing policy objectives.

In this report the author describes and analyses the results of the first ILO pilot Inquiry on Statistics on Investment in Training conducted in 2002 in approximately 30 non-OECD countries from Africa, Asia and the Pacific and Latin America and the Caribbean. The inquiry was designed to identify which kind of statistics on training expenditures and participation are available and/or collected regularly by the national statistical offices and others agencies such as the ministries of labour and/or education and national vocational training authorities and/or institutions in less industrialized countries. The study identified the major sources and providers of statistics available in the countries surveyed as well as the means of access. Actions needed to compile and produce reliable statistics on expenditures and participation in training activities are suggested. This paper contributes, therefore, towards narrowing the existing information gap in this area and, more specifically, future data collection and follow-up activities envisaged to develop the database.

I would like to express my sincere appreciation to Regina Galhardi for her initiative in conducting this study and writing this working paper.

Girma Agune

Director a.i.

InFocus Programme on Skills, Knowledge and Employability

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List of abbreviations

DOL	Department of Labour
EBT	Enterprise-based training
IVT	Institutional vocational training
IVTB	Industrial and Vocational Training Board
LAC	Latin America and the Caribbean
LF	Labour force
MOL	Ministry of labour
NSOs	National Statistical Offices
NVTA/B/C	National vocational training agency/board/council
NVTIs	National Vocational Training Institutions
OJT	On-the-job training
ONI	Other national institutions
SENA	National Training Service, Colombia
SENAI	Servico Nacional de Aprendizagem Industrial, Brazil
SENATI	Industrial and Technical Training Service, Peru
SENCE	National Service of Training and Employment, Chile
TESDA	Technical Education and Skills Development Authority, Philippines
VET	Vocational Education and Training

STATISTICS ON INVESTMENT IN TRAINING: AN ASSESSMENT OF THEIR AVAILABILITY

1. Introduction

The imperative of higher, and often different, knowledge and skills to support employability in the knowledge economy makes access to human capital investment an important consideration for a growing number of individuals, enterprises and governments. Despite the growing attention being paid to such investment, we know little about it on a systematic basis. Without such information, it is very difficult to obtain a true picture of the magnitude and nature of investments in human capital. Likewise, without this quantitative information on a comparative basis, it is difficult to encourage countries, enterprises or entrepreneurs and individuals to increase current efforts to invest in training.

The General Conference of the International Labour Organization, meeting in its 88th Session, 2000, concluded that the “*ILO should develop a database on current expenditures on vocational and continuing training, and suggest a series of benchmarks on investment in training, possibly differentiated for different regions of the world, size of companies or sector of industry*” (para.12).

In general, international compilations of statistics collected at the national level on the costs of institutional vocational training (IVT) have focused on public secondary vocational and technical schools, and vocational training centres and institutes. These compilations consisted of statistics collected in a few countries (around 18) from Asia, Latin America, and Europe during the last two decades, the most recent studies being from the mid-1980s. Statistics from African countries are particularly lacking (Galhardi, R., 2001).¹

The basic information on statistics on investment in training is difficult to collect accurately, largely because much of this investment is not reported in company accounts. Surveys of employer's training costs have been dogged by conceptual problems (e.g., definition of training costs, on-the-job training (OJT), as well as problems of sample selection, low and potentially biased response patterns, and of limited coverage). Nevertheless, efforts have been prominent in developed countries, e.g., the US, the UK, Germany and other countries in the European Union, to overcome these limitations in estimating employer's training costs. Household surveys such as labour force (LF), household expenditure, time use and special surveys or modules on training activities can also throw some light on participation in training activities from the individuals' perspective. So far there have been few efforts to provide a comprehensive picture on the basis of the various survey results and from the relevant administrative sources (Freysson, L., 2000).²

¹ Galhardi, 2001, “The Development of an ILO database on investment in vocational training: a proposal for action”, IFP/SKILLS, ILO, Geneva, 23p (mimeo).

² (Freysson, L., 2000, “*The Eurostat data sources combining education/training and labour market statistics*”, Eurostat – Education and Training Statistics Working Paper, European Commission, Luxembourg.

Information on training costs and on the participation in training is, therefore, very limited and fragmented. In order to develop a database it is necessary, first, to identify the kind of information available and/or systematically collected by those agencies responsible for conducting training surveys, e.g., National Statistical Offices (NSOs) and training agencies, ministries of education and labour, and employers' and workers' organizations. Second, it will be necessary to complement that information by targeting the inquiry to specific repositories of data such as national vocational training institutions (NVTIs), multinational enterprises, and business' organizations, research institutes, regional organizations such as MERCOSUR, etc. with the potential to provide the missing data.

The first pilot inquiry on such statistics was designed to identify which kinds of statistics on training expenditures and participation are available and/or collected regularly, or at least once since 1990, by the NSOs in selected, less industrialized countries. For the purpose of the inquiry, training was defined as *formal, structured work-related learning, including learning in formal and technical school programmes in training centres or institutes as well as in the workplace, both on and off the job, for individuals in and out of the labour force*. Training undertaken as part of compulsory schooling or in preparation for further education should not be included, nor should training activities without any connection to current or possible future employment.

This report describes, analyses and compares the information collected in order to identify the countries/institutions or regions' weaknesses and strengthens on the availability of, and access to, statistics on investment in training activities in two sub-samples. The first sub-sample is composed of those countries where the NSOs replied to the questionnaire and, the second, by those countries where other national institutions (ONIs) related with vocational training policies and activities, e.g., ministries of labour (MOL) and/or employment and human resources and vocational training agencies, boards or councils or vocational training institutions, replied to the inquiry. Section 2 describes the collection method, its content and structure, and the sample of countries covered by the inquiry. It also highlights the way collection of data was organized and compiled. Section 3 provides an overview of the responses received from the NSOs surveyed and, then, a description and analysis of the data and results obtained, highlighting the characteristics (and limits) of the existing data. Section 4 describes and analyses complementary findings obtained from the national vocational training institutions (NVTIs)/agencies and/or MOL and /or employment and human resources in selected countries of the sample. Section 5 compares and assesses the respective role of different providers of information/statistics, emphasizing their major features and differences. The means of access to the information available are analysed and discussed in Section 6. The last and concluding section summarizes the major findings of the pilot inquiry and suggests action needed to compile and produce reliable statistics on expenditures and participation in training activities.

2. The inquiry: structure and content

In order to collect information on statistics on training expenditures available from the NSOs we prepared a questionnaire to be sent by e-mail (with possibility of being printed and sent by fax or ordinary mail) (Annex 1).

The questionnaire was designed on the basis of mock tables to obtain the information on the availability of statistics, as well as to gather a defined sub-set of such statistics whenever they were available. It included also some open-ended and closed questions. It was sent to 39

countries in the African, Asian and Latin American and the Caribbean regions. The sample was selected through discussions with experts and training specialists in the areas concerned (Table 1).

Table 1: List of surveyed countries by region

Asia and the Pacific (& the Middle-East)	Africa	Latin America & the Caribbean
China	Botswana	Argentina
Hong Kong, China	Burkina Faso	Barbados
India	Cameroon	Brazil
Indonesia	Cote d'Ivoire	Chile
Jordan	Egypt	Colombia
Malaysia	Mali	Costa Rica
Philippines	Mauritius	Dominican Republic
Republic of Korea	Nigeria	Guatemala
Singapore	South Africa	Jamaica
Syrian Arab Republic	Tunisia	Mexico
Thailand	Uganda	Peru
Turkey	Zambia	Trinidad & Tobago
Viet Nam		Uruguay
		Venezuela

The questionnaire inquired whether the statistics on expenditures and participation in training activities were available, or could be obtained, for at least one year for the period 1990-2002. Considering that measuring the cost of training provides little information unless it is related to the nature of the training delivered and received, and the characteristics of those delivering and receiving the training, questions addressed the availability of statistics on expenditures in training activities by type of training, the occupation situation of trainees, the sector of their work activity, and the sources of funding. Statistics on participation in training activities, breakdown by occupation, gender, sector, and age of trainee, were requested. Information on the availability of plans for future surveys or inquiries at the national level, or any work-in-progress activity on this area, was also requested.

The sources of statistics covered by the questionnaire were: (a) reports from training institutions to a relevant authority, (b) statistical survey of NVTIs, (c) Statistical survey of (non-training) establishments, (d) household (or LF) survey, (e) other administrative records not included in the reports from training institutions, and (f) official estimates based on several sources. These surveys have the potential to provide information on training expenditures and participation, if not directly, through related issues. Moreover, the usefulness of these surveys lies in allowing cross-tabulation of different variables among several sources.

3. Analysis of results and major findings from National Statistical Offices (NSOs)

The following description of the results obtained is based on replies to the specially designed questionnaire sent in March 2002 to the NSOs of the 39 countries listed in Table 1. Not all countries replied. About 25 countries had replied by the end of April 2002. After a time-consuming reminder process through several telephone calls and faxes to the sample of

NSOs, we received back a total of 32 questionnaires by the end of May. Among the countries that replied, some questionnaires were filled in by other relevant authorities and, in other cases, information was sent on the relevant authority that could provide the statistics. Further information was obtained pursuing these contacts. Table 2 highlights the results of replies from the NSOs.

Table 2: Overview of the replies from National Statistical Offices (NSOs)

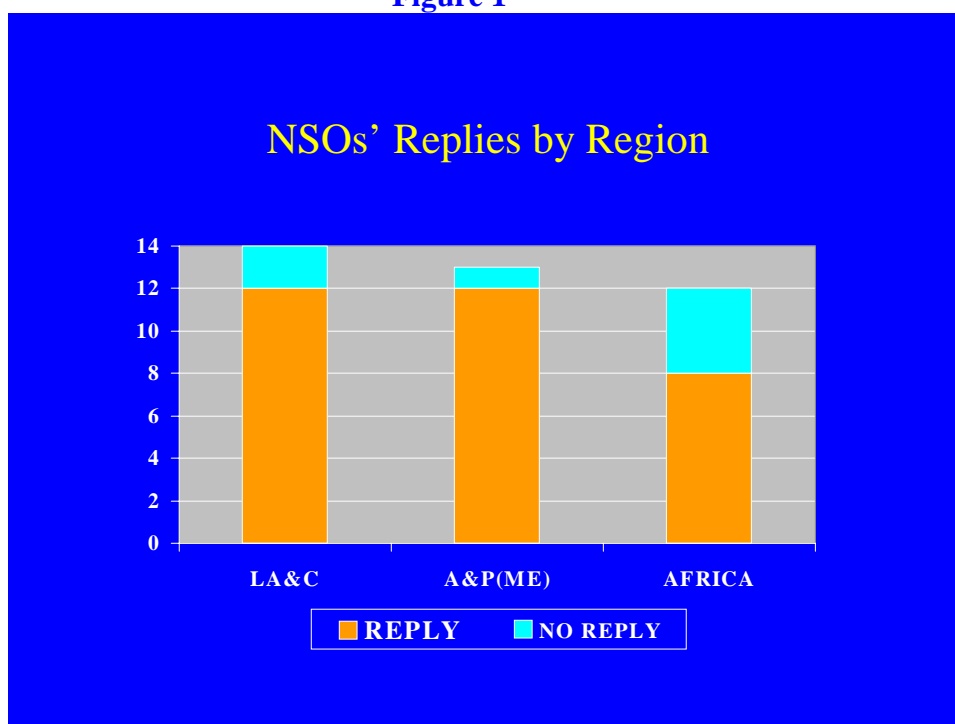
Country	Statistics available		Source of statistics*					
	expenditure	participation	A	B	C	D	E	F
1. Philippines	NO	NO						
2. Indonesia	NO	NO						
3. Hong Kong	YES	YES	✓	✓	✓	✓	✓	✓
4. India	NO	NO						
5. China	NO	NO						
6. Viet Nam	YES	YES	✓			✓		✓
7. Korea	YES	YES	✓	✓	✓	✓	✓	✓
8. Singapore	YES	YES			✓	✓		
9. Malaysia	NO	NO						
10. Brazil	NO	NO						
11. Argentina	NO	NO						
12. Chile	NO	YES	✓	✓				
13. Peru	NO	NO						
14. Colombia	NO	YES	✓			✓		✓
15. Costa Rica	YES	YES	✓			✓		
16. Guatemala	YES	YES				✓		
17. T & Tobago	NO	NO						
18. Barbados	NO	NO						
19. Jamaica	NO	NO						
20. Dominican R	YES	YES	✓			✓		✓
21. Mexico	NO	NO						
22. Syria	YES	YES	✓	✓		✓		✓
23. Turkey	YES	YES		✓				
24. Jordan	YES	YES					✓	
25. Botswana	NO	NO						
26. Cameroon	NO	NO						
27. Egypt	NO	YES	✓	✓	✓	✓		✓
28. Tunisia	YES	YES	✓	✓	✓	✓	✓	
29. Burkina Faso	NO	NO						
30. Zambia	YES	YES	✓		✓	✓	✓	✓
31. Mauritius	NO	NO						
32. South Africa	NO	NO						

*Note: from the questionnaire: Question no. 1

- (a) Reports from training institutions to a relevant authority;
- (b) Statistical survey of NVTIs;
- (c) Statistical survey of (non-training) establishments;
- (d) Household (or labour force) survey;
- (e) Other administrative records not included in the reports from training institutions;
- (f) Official estimates based on several sources.

Among the countries in the sample, the three middle-eastern countries included, i.e., Turkey, the Arab Republic of Syria and Jordan, replied to the questionnaire. Between the ten Asia and the Pacific countries in the sample, only Thailand did not reply. In the case of the Latin American and the Caribbean countries, among the 14 selected, only two, i.e. Uruguay and Venezuela, did not answer the questionnaire. The biggest absence of replies came from the African sample - from the 12 countries contacted, only eight replied. The four that did not answer the questionnaire were: Cote d'Ivoire, Mali, Uganda and Nigeria (Figure 1).

Figure 1



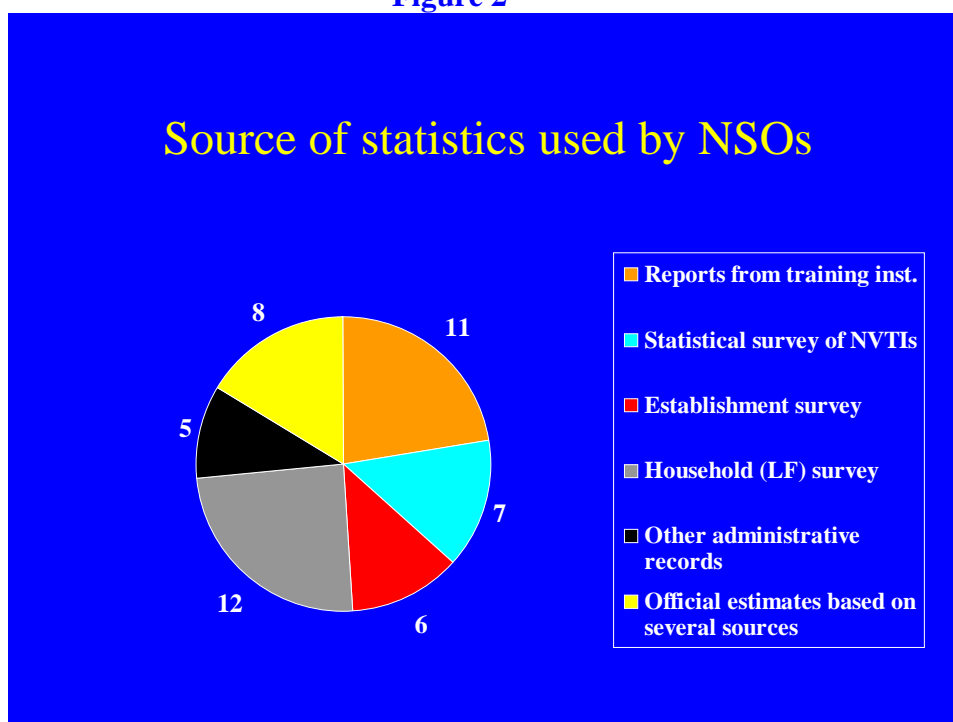
From the 32 answers received, only 12 countries said that they had, and could provide, statistics on both participation and expenditures in training. Another three countries, i.e. Chile, Colombia and Egypt, informed that they could provide information just on participation in training. Altogether 15 countries indicated that they could provide statistics on expenditure and/or participation in training.

In regional terms, all three middle-east countries included in the sample could provide both statistics on participation and expenditure in training. Among the Latin American and Caribbean (LAC) countries, only three indicated that they could provide these statistics, namely Costa Rica, Guatemala and the Dominican Republic. Among the African countries, only Zambia and Tunisia stated that such information could be offered by the NSOs.

As indicated in Table 2, among the six sources of statistics on expenditure and/or participation in training, household (or labour force) survey is the most common source. In the case of Jordan, Turkey and Chile these surveys are not used for providing statistics on training activities. The next important source pointed out by the respondents were the reports from training institutions to a relevant authority. This was not the case in Singapore, Guatemala, Turkey and Jordan. The remaining 11 countries acknowledged the availability of such reports. Statistical surveys of NVTIs seem to be a relatively important source of data on expenditures and participation in training activities as almost half of those countries, i.e. seven

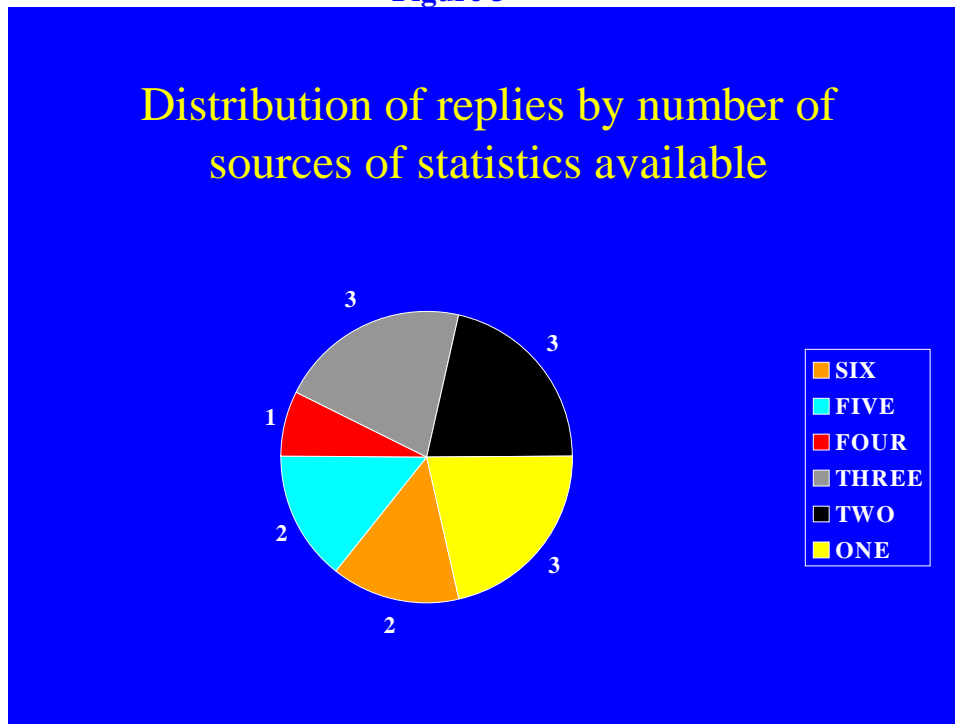
NSOs, said they could provide statistics on both variables from such a source. This source is particularly important in the case of Turkey, as it is the only source of statistics on investment in training available to the NSO. Six countries could also provide information from establishment surveys. Administrative reports other than those already included in the NVTIs reports do not seem to be a significant source of information on investment in training considering the sample as a whole. Only five countries indicated this as a source of such data. However, for some countries this could be a relevant source of statistics on expenditure and participation in training activities, as in the case of Jordan for instance. For this country, this is the only source available. Official estimates based on several other sources seem to be a complementary source of information available as indicated by eight countries of the sample. The relative importance of the six sources of statistics is presented in Figure 2.

Figure 2



The situation of countries such as Hong Kong/China and the Republic of Korea is rather striking. Both of them indicated that they could collect the information required from all six sources of statistics suggested. In the African region, three NSOs, - Zambia, Tunisia and Egypt - informed that information could be provided from at least five sources. On the other hand, some countries stated that data could only be collected from one source of statistics. In the case of Guatemala, these are collected from household (or LF) surveys, in the case of Turkey from surveys of training institutions, and in Jordan from other administrative records. Singapore, Chile and Costa Rica may provide the data from two sources of statistics. The others can provide data from, in general, three or four sources of statistics. Figure 3 illustrates the distribution of replies by the number of sources of statistics.

Figure 3



Summing up, information on expenditures and participation in training activities, if available, can be obtained through gathering data from different sources. It seems quite clear that there is not a single survey that can provide information on both variables. It is the combination of information from several surveys, and according to their own specificities and coverage, that can help to build up the picture of how much is spent on vocational training and by whom.

3.1 The scope of data available on expenditure

As mentioned before, 12 NSOs indicated that they could provide statistics on expenditures in training activities. The questionnaire inquired about the availability of such data broken down by (i) the industry in which trainees were working, (ii) the occupational situation of trainees, whether employed, unemployed or outside the LF, (iii) the type of training provided, and (iv) the source of funds used to finance the training activity. Table 3 shows the findings.

Among the 12 countries of the sub-sample, ten said that these statistics could be provided, broken down by sources of funds. Only in Costa Rica and Turkey this information is not available. Expenditures in training by type of training seem to be largely available too. Only Singapore, Costa Rica and Jordan said that they could not provide this information. A breakdown by occupation can be obtained in at least eight countries of the sample. Availability of statistics on expenditure in training by the industrial sector of those trained is the least available at the NSOs. This is only available in some Asian countries, e.g. Hong Kong, the Republic of Korea and Singapore, and in two African countries - Tunisia and Zambia. These countries, except Singapore and Tunisia, are those in which statistics on expenditures in training can be provided by all four breakdowns suggested.

Table 3. Availability of statistics on expenditure in training

Country	Industry	Occupation	Type of training	Source of funds
Hong Kong	✓	✓	✓	✓
Viet Nam			✓	✓
Korea	✓	✓	✓	✓
Singapore	✓	✓		✓
Costa Rica		✓		
Guatemala		✓	✓	✓
Dominican R.		✓	✓	✓
Syria		✓	✓	✓
Turkey			✓	
Jordan				✓
Tunisia	✓		✓	✓
Zambia	✓	✓	✓	✓

In terms of expenditures in training activities by type of training, the inquiry requested whether information was available by the following type of training activities: (i) IVT³; (ii) apprenticeship; (iii) enterprise-based training (EBT); and (iv) training for specific target groups e.g. youth, unemployed, women, persons with disabilities, etc.

It is interesting to see that among those countries that indicated having the statistics on expenditures in training available, two of them - Singapore and Costa Rica - do not have them disaggregated by type of training. Zambia, Tunisia, the Dominican Republic, and Hong Kong/China are the four countries able to provide data on the four breakdowns proposed. The three middle-eastern countries can provide data on expenditures on IVT and the Arab Republic of Syria and Turkey also on apprenticeship. Viet Nam has only data on IVT expenditures. This is the most available information collected by the NSOs that replied to this question as all of them indicated that they could provide this data. Expenditures on apprenticeship come second in terms of availability. Statistics on EBT expenditures and those directed to specific target groups are available in six countries of the sub-sample.

With regard to sources of funds used to finance training activities, information was requested on the possibility of having statistics broken down by public and/or private, international and/or regional, and individual budgets. Table 5 summarizes the results.

³ IVT is defined as structured training activities that take place in vocational and technical schools, training centres, proprietary schools or other institutions but not operated by enterprise.

Table 4. Expenditure in training by type of training

Country	IVT	Apprenticeship	EBT	Target group
Hong Kong	✓	✓	✓	✓
Viet Nam	✓			
Korea	✓		✓	✓
Singapore	NO	NO	NO	NO
Costa Rica	NO	NO	NO	NO
Guatemala	✓	✓	✓	
Dominican R.	✓	✓	✓	✓
Syria	✓	✓		✓
Turkey	✓	✓		
Jordan	✓			
Tunisia	✓	✓	✓	✓
Zambia	✓	✓	✓	✓

Table 5. Expenditure in training by source of funds

Country	Government	Private	International	Individual
Hong Kong	✓	✓		✓
Viet Nam	✓			
Korea	✓	✓	✓	✓
Singapore	NO	NO	NO	NO
Costa Rica	NO	NO	NO	NO
Guatemala	✓		✓	
Dominican R.	✓	✓	✓	✓
Syria	✓		✓	
Turkey	NO	NO	NO	NO
Jordan	✓			
Tunisia	✓	✓		
Zambia	✓	✓	✓	✓

In this case, Turkey joined Singapore and Costa Rica on the absence of breakdowns on expenditures in training. The remaining countries indicated the availability of statistics on expenditure in training by public sources, i.e. government budget. Some of them also have the possibility of providing data on expenditures by private sector. Only three countries stated that they could provide statistics broken down by the four sources suggested, namely the Republic of Korea, the Dominican Republic and Zambia. Information on individuals' expenditures in vocational training in countries could be found in Hong Kong/China in addition to the three previously cited. Statistics on funding by international agencies or foreign sources are available in some countries.

3.2 The scope of data available on participation

Concerning participation in training, the availability of data is greater considering that three countries of the sample - Chile, Colombia and Egypt - can only provide statistics on this indicator of investment in vocational training. Their respective NSOs do not collect

information on expenditures in training. Therefore, 15 countries, out of 32 that replied to the questionnaire, have statistics on participation in training activities. They were asked to inform whether information could be obtained by: (i) sex of trainees; (ii) age group of trainee; (iii) industry of trainees' main job; (iv) occupation of trainees' main job; and (v) type of training undertaken, i.e. institutional training, apprenticeship, EBT or for a specific target group, e.g., youth, women, persons with disabilities, adult unemployed, etc.

As presented in Table 6, eight countries have data on participation in training and by the five breakdowns proposed. Viet Nam, however, can only provide information on enrolment in training activities by type of training. Costa Rica can offer statistics broken down by sex and age of participants in training activities. Colombia, on the other hand, does not have information available on these two variables, but could provide data on the industrial sector and occupation of trainees' main job and type of training as well as Tunisia.

Table 6: Availability of breakdowns on statistics on participation in training

Country	Sex	Age	Industry	Occupation	Type of training
Hong Kong	✓	✓	✓	✓	✓
Viet Nam					✓
Korea	✓	✓	✓	✓	✓
Singapore	✓	✓	✓	✓	✓
Chile					
Colombia			✓	✓	✓
Costa Rica	✓	✓			
Guatemala	✓	✓		✓	✓
Dominican R.	✓	✓	✓	✓	✓
Syria	✓			✓	✓
Turkey	✓	✓			✓
Jordan	✓	✓	✓	✓	✓
Egypt	✓	✓	✓	✓	✓
Tunisia	✓		✓	✓	✓
Zambia	✓	✓	✓	✓	✓

In terms of the availability of statistics on participation in training by the breakdowns proposed, type of training seems to be the most easily available followed by sex, occupation and, then, age in a descending order in respectively 13, 12, 11 and 10 countries. The least available information is on participation by the industrial sector of trainees' main job. Even in this case, more than half of the sample (i.e. nine countries) indicated that they could provide this kind of information.

3.3 Dissemination of data

When data is available, is it easily accessible? If so, through which means? Has the data already been provided to some international or regional institutions? These questions were put to the respondents and just two countries informed the data had been provided to other international organizations. Egypt indicated a yearly submission of statistics on enrolment in training to UNESCO. Tunisia informed having submitted data on investment in training to the World Bank in January 2002. Syria did not answer the question.

Among the replies which indicated the availability of statistics on expenditures and/or participation in training, almost all of them, with the exception of the Arab Republic of Syria, Turkey and Zambia who did not answer the question, indicated that they could provide the data in hard copy. The information is also available in electronic format in many countries, except Viet Nam and Costa Rica. The latter, instead, can provide the information by Internet as well as Guatemala and the Asian countries, e.g. Hong Kong, China, the Republic of Korea and Singapore. Although the majority of countries have not provided the data to international organizations, they seem to be accessible if required. Table 7 presents these findings.

Table 7: Means of access and future developments

Country	Means of access			Collection of data in the future	
	Hard	Electronic	Internet	Yes/Sources	No
Hong Kong	✓	✓	✓	a,b,c,d,e,f	
Viet Nam	✓			a,d,f	
Korea	✓	✓	✓	a,b,c,d,e,f	
Singapore	✓	✓	✓	c,d	
Chile	✓	✓			✓
Colombia	✓	✓		a,f	
Costa Rica	✓		✓		✓
Guatemala	✓	✓	✓		✓
Dominican R.		✓		a,f	
Syria	n.a			n.a	n.a
Turkey	n.a			b,d	
Jordan	✓	✓			✓
Egypt	✓	✓		a (enrolment)	
Tunisia	✓	✓		a,b,d,e,f	
Zambia	n.a			d	

Concerning future action on collecting and producing statistics on expenditures and/or participation in training, replies indicate that most of the countries intend to continue collecting them in the future (Table 7). Some countries such as the Asian ones, i.e. the Republic of Korea and Hong Kong/China, will continue to collect the information from all the sources of statistics proposed and used by them. The same last observation is valid for Singapore and Viet Nam. Tunisia will drop information from surveys on establishments and search information in other official estimates based on non-specified sources. In Latin America, two countries - Colombia and Guatemala - informed that they will pursue this practice but concentrating on two sources of statistics, i.e. the reports from training institutions and other official estimates available. Zambia also seems to be focusing on gathering the information from household surveys by dropping other sources previously used. Turkey seems to have the intention of broadening the coverage of the information by assembling data also from household surveys in addition to those provided by the surveys of NVTIs. In these cases, the trend seems to be an attempt to concentrate efforts on the existing sources that may provide more reliable and systematic data on investment in training.

A few countries stated that they will not continue collecting statistics on expenditures and participation in training. These are three from the Latin American region, namely Chile, Costa Rica and Guatemala, and one from the Middle East, i.e. Jordan. This may suggest that they no longer have an interest in obtaining this kind of data. However, it may also indicate

that the NSO might not be the best institution to deal with this information, especially if, in the countries concerned, the national public vocational training institution or the ministry of labour, for instance, is the agency responsible for the management, operation and implementation of vocational training actions and controls the budget too. This suggests also that, in order to have access to information on expenditures and participation in training, an assessment of the country's national vocational training system is needed in order to identify the institutions that may have the information required. This is the rationale behind the fact that we complemented the information provided by the NSOs with other information obtained from the NVTIs and/or MOL or related agencies in several countries of the sample, precisely in those that replied negatively to the inquiry. The next session will describe the findings from these institutions.

4. Complementary findings from other national institutions (ONIs)

During the month of May 2002, we sent the questionnaire to NVTIs/agencies and/or MOL in the countries whose NSOs said they did not have the data available. Among those countries, most of them replied to this second inquiry positively. This is an indication that those institutions were the right ones to be addressed, i.e. the collectors and suppliers of the information on investment in training activities. Other countries, notably India, China and Indonesia did not reply to the questionnaire, however, we managed to find an explanation for their failure to respond. In the case of China, the explanation was that the questions could not be answered because they did not match their own standards of statistics classification. In India, the problem was the decentralization of the vocational training system. The ministries are in charge of their own statistics and institutions funded by the federal government. There seems to be very few of them. State governments manage and determine their training budgets and expenditures and have the responsibility of generating their own statistics. In Indonesia, the situation is similar as far as decentralization of information is concerned. The availability of data on training expenditures and participation is spread among several government institutions. In some departments or institutions, data may be available in specific divisions or units. In others, it may be stocked in different divisions across the institution or department. In both cases, an attempt to gather the information would require additional efforts to collect and combine data from the different potential sources. Similar reasons may explain the absence of replies from Mexico, Botswana and Burkina Faso.

It is interesting to note that all the institutions contacted in this complementary attempt indicated that they could provide information on both expenditures and participation in training activities, with the exception of Trinidad & Tobago and Cameroon. The former does not have statistics on participation but on expenditures and, vice versa for the latter. Table 8 shows these findings.

Most of the replies (i.e. eight countries) came from the MOL or an agency subordinated to the Ministry as in the case of Chile, but not exclusively. The national vocational training agency, board or council only completed a few questionnaires. This was the case of the Philippines, Mauritius, and Barbados. Additional information was obtained in the case of Malaysia and Jamaica whose respective ministries of human resources and labour also provided relevant information on the statistics available. In other countries, in addition to the reply from the MOL, we received information from the NVTI, e.g., Brazil and Peru. In Colombia, the questionnaire was replied by the latter only. It is no surprise that in Latin America, information and statistics on investment in training can be provided by the NVTIs. This is the institutional arrangement that characterizes the so-called Latin American model of

vocational training. In general, these institutions are subordinated to the MOL, with a ruling body composed of public sector, private firms, and unions' or workers' representatives. In most countries, they were created with statutory authority to impose a levy on firms, or with a firm claim on budget resources (Galhardi, 2002).⁴

Table 8: Overview of replies from other national institutions (ONIs)

Country	Statistics available		Source of information
	Expenditure	Participation	
1. Philippines	✓	✓	Technical Education and Skills Development Authority (TESDA)
2. Indonesia	n.a.	n.a.	
3. India	n.a.	n.a.	
4. China	n.a.	n.a.	
5. Malaysia	✓	✓	Ministry of Human Resources (JTR) and National Vocational Training Council (MLVK)
6. Brazil	✓	✓	Servico Nacional de Aprendizagem Industrial (SENAI)
	✓	✓	Ministry of Employment and Labour (MET)
7. Argentina	✓	✓	Ministry of Labour, Employment and Social Security
8. Chile	✓	✓	Servicio Nacional de Capacitacion y Empleo (SENCE)
9. Peru	✓	✓	Ministry of Labour and Employment Promotion
	✓	✓	Servicio Nacional de Adiestramiento en Trabajo Industrial (SENATI)
10. Colombia	✓	✓	Servicio Nacional de Aprendizaje (SENA)
11. T & Tobago	NO	✓	Ministry of Labour and SME Development
12. Barbados	✓	✓	Technical and Vocational Education and Training Council (TVETC)
13. Jamaica	✓	✓	Ministry of Labour and Social Security
	✓	✓	HEART Trust / National Training Agency
14. Cameroon	✓	NO	Ministry of Employment, Labour and Social Security
15. Mauritius	✓	✓	Industrial and Vocational Training Board (IVTB)
16. South Africa	✓	✓	Department of Labour (DOL)

All the countries in this sub-sample, with the exception of South Africa and Argentina, can provide information from reports from training institutions to a relevant authority. This is the unique source of statistics in the case of Barbados. In general, information is also available from statistical surveys of NVTIs as pointed out by nine institutions from seven countries. This is, however, the only source of statistics on training expenditure and participation compiled by the National Vocational Training Council (MLVK) of Malaysia. Another important source of data is household or LF survey, accessible to both the ministries and the national vocational training agencies (NVTAs) or institutions as in the case of Brazil and Colombia. Very few institutions reported that they could provide information from establishment surveys. This is the least available source of statistics as illustrated by Table 9.

⁴ Galhardi, 2002: *Financing Training: Innovative approaches in Latin America*, Boletín of Cinterfor, Cinterfor/OIT, Uruguay, forthcoming.

Table 9: Source of statistics available in other national institutions (ONIs)

Country	Supplier of Info.	Sources of statistics available					
		A	B	C	D	E	F
Philippines	TESDA	✓	✓				✓
Malaysia	JTR ¹	✓		✓		✓	✓
	MLVK ²		✓				
Brazil	SENAI	✓	✓		✓		✓
	MOL	✓	✓		✓		✓
Argentina	MOL				✓	✓	✓
Chile	SENCE	✓	✓				✓
Peru	MOL			✓	✓	✓	
	SENATI	✓					
Colombia	SENA	✓			✓		
T & Tobago ³	MOL	✓	✓		✓		
Barbados	TVETC	✓					
Jamaica	MOL	✓	✓		✓		✓
	HEART	✓	✓		✓		
Cameroon ⁴	MOL				✓	✓	
Mauritius	IVTB	✓	✓	✓	✓	✓	
South Africa	DOL			✓	✓	✓	✓
Notes: 1) Manpower Department 2) National Vocational Training Council 3) Participation only 4) Expenditure only A. Reports from training institutions to a relevant authority. B. Statistical survey of NVTIs. C. Statistical survey of (non-training) establishments, D. Household (or labour force) survey. E. Administrative records not included in the reports from training institutions. F. Official estimates based on several sources.							

4.1 The scope of data available on expenditure

Table 10 shows that statistics on expenditures can be offered in different levels of disaggregation in most of the countries of the sub-sample. At least more than half of them, i.e. seven countries, can provide statistics on expenditures broken down by the industrial sector in which those trained were working, their occupational situation, type of training provided and source of funds used to finance the training activity. Peru can offer the information by the four variables proposed due to the combination of statistics collected by different providers, i.e. the MOL and the NVTI for the industrial sector. The NVTI in the Philippines does not have data on expenditures broken down by industrial sector, nor Cameroon by sources of funds. In the case of South Africa, the Department of Labour (DOL) can only provide data on expenditures in training by the industrial sector. In the Technical and Vocational Education and Training Council (TVETC) of Barbados data is only available broken down by the occupational situation of trainees.

Table 10: Statistics available on expenditures in training by industry, occupation, type of training and source of fund in other national institutions (ONIs) (e.g. MOLs and NVTAs)

Country	Industry	Occupation	Type of Training	Source of Fund
Philippines		✓	✓	✓
Malaysia (JTR)	✓	✓	✓	✓
(MLVK)	✓	✓	✓	✓
Brazil (MOL)		✓		✓
(SENAI)	✓	✓	✓	
Argentina	✓	✓	✓	✓
Chile	✓	✓	✓	✓
Peru (MOL)	✓	✓	✓	✓
(SENATI)	✓		✓	✓
Colombia	✓	✓	✓	✓
Barbados		✓		✓
Jamaica (MOL)	✓	✓	✓	✓
(HEART)	✓	✓	✓	✓
Cameroon ¹	✓	✓	✓	
Mauritius	✓	✓	✓	✓
South Africa	✓			

¹Ministère de la Fonction Publique et de la reforme Administrative

In terms of statistics on expenditures broken down by type of training, i.e. IVT, apprenticeship, EBT, and training directed to target groups, just four countries, precisely the Philippines, Malaysia, Jamaica and Mauritius, indicated that they could offer them by the four categories inquired (Table 11). In the specific case of Malaysia and Jamaica, this was possible due to information gathered and combined from different providers. In the other countries, precisely on those from the LAC region, data can be obtained but with less breakdowns. In Brazil and Peru, the NVTIs seem to collect information on training courses offered by themselves or other training institutions funded or co-funded by them, on apprenticeship courses and EBT. The National Training Service (SENA) from Colombia indicated that it could not provide data on EBT expenditures, instead, it collects information on training expenditures directed to target groups. This is also the only breakdown available at the MOL in Argentina. Chile has also indicated that National Service of Training and Employment (SENCE) collects data on training expenditures directed to target groups and by enterprises. This information is very consistent with the role the SENCE plays in the area of Vocational Education and Training (VET) in Chile. SENCE, under the supervision of the MOL, regulates training and does not own or operate training facilities. It administers an income rebate programme for firms that directly provide or contract out registered providers to develop training programmes for their workers. It also operates a National Fund of Skills Development, whose resources are allocated to finance training actions for disadvantaged groups (Galhardi, 2002, op cit).

Table 11: Statistics available on expenditures in training in other national institutions (ONIs) (e.g. MOLs and NVTAs) by type of training

Country	IVT	Apprenticeship	EBT	Target group
Philippines	✓	✓	✓	✓
Malaysia (JTR)	✓	✓		✓
(MLVK)	✓	✓	✓	✓
Brazil (MOL)				
(SENAI)	✓	✓	✓	
Argentina				✓
Chile			✓	✓
Peru (MOL)			✓	
(SENATI)	✓	✓	✓	
Colombia	✓	✓		✓
Barbados				
Jamaica (MOL)	✓	✓	✓	
(HEART)	✓	✓	✓	✓
Cameroon ¹				
Mauritius	✓	✓	✓	✓
South Africa				

¹Ministère de la Fonction Publique et de la reforme Administrative

Considering that some institutions/countries did not answer the question on this issue, i.e. the DOL in South Africa, the MOL in Brazil, the TVETC of Barbados, and Cameroon, the classification of “types of training” included in the questionnaire may not be the most appropriate to these countries. Conceptual and/or definitional problems may have hindered them from completing the choices provided. This points out the complicated issue of obtaining comparable data on expenditures in training across countries and constructing a coherent set of data. Although this may be desirable, it may not be feasible on a pilot scale and, even less, in a major, broader survey. Disaggregated figures will have to be gathered by additional efforts through national surveys and case studies.

As far as sources of funds are concerned, Table 12 shows that public investment in training is more easily available than private expenditures. Individual expenditure in training is the least available information. In some countries like Brazil and Peru, the NVTIs did not answer this question. This could indicate that they are not interested in other sources of funds besides their own which is derived from levies on payroll; although this may not be a reasonable explanation for their blank answers, because the literature shows that these institutions are competing for extra resources and can bid for other public and international sources of funds. This may indicate that the best provider of detailed information on source of training funds is the MOL due to the changing role of the government in the process of funding training in several countries and, particularly, in the two above-mentioned. In these countries, for instance, there is clear evidence that the government, through the MOL, is changing from the traditional role of operator and provider of training, to the role of financial agent, i.e. buyer of training (Galhardi, 2002, *ibid.*).

Table 12: Statistics available on expenditures in training in other national institutions (ONIs) (e.g. MOLs and NVTAs) by source of fund

Country	Government	Private	International	Individual
Philippines	✓	✓		✓
Malaysia (JTR)	✓	✓	✓	
(MLVK)	✓			
Brazil (MOL)	✓	✓		
(SENAI)				
Argentina	✓		✓	
Chile	✓	✓		
Peru (MOL)		✓		
(SENATI)				
Colombia	✓			
Barbados	✓	✓		
Jamaica (MOL)	✓	✓	✓	✓
(HEART)	✓		✓	
Cameroon				
Mauritius	✓		✓	✓
South Africa				

4.2 The scope of data available on participation

On participation in training, governments and NVTIs indicated that information could be accessed in a disaggregated manner, but particularly by sex, industry and type of training as shown in Table 13. Information on enrollment of trainees by sex is the most available, in every country and/or institution of the sub-sample, followed by type of training, industry of trainees' main job and occupational situation in a descending order. Even in the last category, data can be obtained in 10 countries out of 12. Barbados and Colombia are the countries that cannot provide information on enrollment in training broken down by occupation and industrial sector of trainees' main activity. Age of trainees seems to be the information least collected and available. South Africa is the only country that does not have statistics on participation in training by type of training activity.

4.3 Dissemination of data

All institutions contacted during the complementary inquiry exercise indicated that the information available could be obtained in hard copy among other means (Table 14). This is the only way data from Barbados and Cameroon can be obtained. Data can also be accessed electronically in most of the countries, with the exception of Chile and Trinidad & Tobago. In these countries, data can be obtained via Internet as well (the websites of the institutions were provided).

Table 13: Statistics available on participation in training in other national institutions (ONIs)

Country	Sex	Age	Industry	Occupation	Type of training
Philippines	✓		✓	✓	✓
Malaysia	✓	✓	✓	✓	✓
Brazil	✓	✓	✓	✓	✓
Argentina	✓	✓	✓	✓	✓
Chile	✓	✓	✓	✓	✓
Peru (MOL)	✓	✓	✓	✓	✓
(SENATI)	✓		✓		✓
Colombia	✓				✓
Barbados	✓	✓			✓
T&Tobago	✓		✓	✓	✓
Jamaica (MOL)	✓		✓	✓	✓
(HEART)	✓		✓		✓
Mauritius	✓	✓	✓	✓	✓
South Africa	✓		✓	✓	

Among the 13 respondents, just one, i.e. Barbados, informed that it does not intend to collect and produce statistics on expenditures and/or enrollment of training in the future. In the case of Malaysia, it was the National Vocational Training Council of Malaysia MLVK that expressed its lack of intention to generate or gather information concerning expenditures and participation in training in the future. On the other hand, the Ministry of Manpower will continue collecting these kinds of statistics through reports from, and statistical surveys of, NVTIs. The Ministry intends also to use other administrative records and official estimates based on several sources.

Table 14: Dissemination of data and future plans for collection

Country	Means of access			Future collection of data	
	Hard	Electronic	Internet	Yes/sources	No
Philippines	✓	✓	✓	a,b	
Malaysia	✓	✓		a,b,e,f	MLVK
Brazil (MOL)	✓	✓	✓	a,b,d,f	
(SENAI)	✓	✓		a,d	
Argentina	✓	✓	✓	a,d,e,f	
Chile	✓		✓	a,f	
Peru (MOL)	✓	✓		a,b,c,d,e	
(SENATI)	✓	✓		a	
Colombia	✓	✓		a,d	
T & Tobago	✓		✓	a,b,d	
Barbados	✓				✓
Jamaica (MOL)	✓	✓		a,b,d,f	
(HEART)	✓	✓		a	
Cameroon	✓			a,b	
Mauritius	✓	✓		a,b,c,d,e	
South Africa	✓	✓		c,e	

Most of the sample intends to pursue this information through data provided by the NVTIs either in the reports or statistical surveys. Household surveys are another source of information that will be used in some countries in addition to the previous ones. This is particularly the case of Trinidad & Tobago, who rely on these sources for future collection of statistics on investment in training.

Very few countries indicated that they would look at statistical surveys of establishments. This does not seem to be available. Data from this source could be obtained only in Mauritius, South Africa and Peru. In the latter, the MOL launched an enterprise survey in 2001 to find out about the human resource training and development policy of private enterprises. This information is considered very important to assist policy-makers in the definition of policies and strategies for the personal and professional development of the LF, as well as rising enterprise's productivity and competitiveness, and employment in general. Ultimately, understanding the extent, the efficiency and the limits of training offered by enterprises is a prerequisite for focusing supplementary training and support actions. The Government has raised the interest in implementing this exercise in a more systematic way in the future, maybe through an "ad hoc" module of questions on participation and expenditures on education and training in enterprises to be used in the LF survey. In particular the case of South Africa, where the DOL expressed its intention to use this source of information to report on statistics on training in the future. Other administrative records and official estimates from several sources will be used in several countries in combination with the other more specific sources of data.

Some institutions mentioned that they have provided information on expenditures and participation in training to other organizations upon request. This is the case of SENA from Bolivia. SENA provides annually this kind of data to the National Planning Department. The MOL in Peru informed that statistics of this kind were provided to the ILO Regional Office (AMERICAS) in December 2000. HEART from Jamaica submitted statistics on investment in training to the World Bank, the Planning Institute of Jamaica and the MOL in 2001. SENAI, Brazil provides similar data to CINTERFOR/ILO, Uruguay, yearly. In Malaysia, the Ministry of Manpower submitted statistics on expenditures and participation in training to the Ministry of Education in April 2002. The MLVK, Malaysia provided similar data to the Public Service Department in May 2002.

As illustrated by the respondents, the lack of demand of statistics on investment in training is striking. This may be explained, on the one hand, by the role of providers and, on the other, by their own limitations as a valid and reliable indicator. The institutions in the sub-sample that produce the data are the same that use the data either because they are the regulators, and/or providers and/or financial agents of training in each country. Moreover, regional and international organizations are, in principle, interested in cross-country comparisons, also there is no assurance that the statistics available at the national level could be compared between countries. However, the lack of requests for such statistics may contribute to perpetuate a vicious circle in which valid and reliable statistics are not generated because there is no demand for such information. Attempts to break this circle have been pursued in advanced industrialized countries, for instance, in the OECD and EU countries. In the last few years, several initiatives have been launched to consolidate and harmonize the data collected on education and training by the member States with the view of allowing comparisons to be made between countries and regions. In addition, the generation of new data and statistics on expenditures in education and training has also been the target of several

projects conducted by the member States through several surveys initiated over the last few years⁵. It should be noted that these initiatives arose from the need to assess the effectiveness of the policy on lifelong learning, which is central to both the European employment strategy and the development of the European knowledge-based economy at present being pursued across the Union.

5. National Statistical Offices (NSOs) versus other national institutions (ONIs): an assessment of their respective roles

Among the 26 countries that responded positively to the inquiry, 15 could provide information collected by, and available at, the NSOs. Unfortunately, in three countries, i.e. Chile, Colombia and Egypt, the statistics available are only about participation in training. In another nine countries, it was the MOL, employment or human resources that could provide statistics on expenditures and/or participation in training. In one case the statistics available are on expenditures only and, in another on participation. In the remaining seven countries, information could be obtained on both indicators. In five other countries, the respective NVTAs/B/C is the supplier of such statistics. These institutions seem to have information on both expenditures and participation in training. Data on expenditures and participation in training from NVTIs is available in three countries of the sample (Table 15).

Due to the limit of information provided by some institutions, it is clear that data need to be complemented by different sources. This can be illustrated by the case of Chile, where the information available at the NSO can be complemented by that provided by the MOL. In other cases, this complementary information can be obtained through the NVTIs as in Colombia. In the other two countries in which NVTIs replied to the questionnaire, the information seems to be redundant and duplicated by that supplied by the MOL. Moreover, as pointed out by the respondents, the information provided is exclusively related to their own training activities.

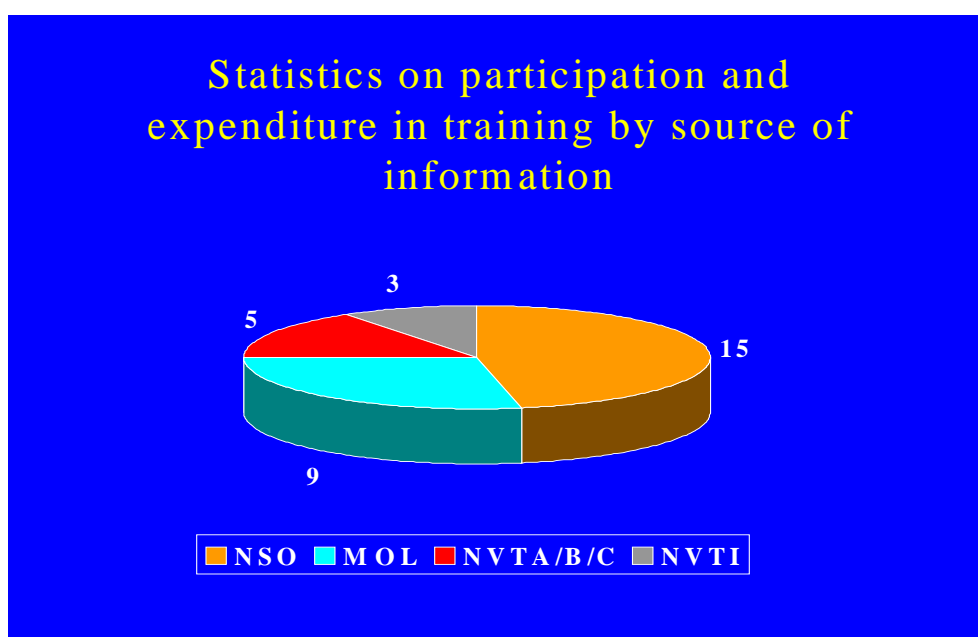
These sources of statistics are, therefore, not mutually exclusive. On the contrary, they are complementary to each other. This complementary role needs to be explored in order to overcome the limitations of each institution in this particular subject. The information provided by the NVTIs seems to be redundant/duplicated because these institutions are, in general, subordinated to the MOL that centralizes the information, at least, in the countries concerned. If this is the case, the NSOs and the ministries responsible for vocational training policies and programmes are the primary source of statistics on expenditures and/or participation in training as illustrated in Figure 4. Data from the NVTIs seems to be a secondary source of statistics, and used in addition to information offered by the ministries or NSOs.

⁵ European Communities, 2001, Proceedings of the tenth seminar: Education and training statistics and the functioning of labour markets - Thessaloniki, Greece, 11 and 12 May 2000, Luxembourg.

Table 15. Statistics on participation and expenditures in training by supplier

Country	Supplier of statistics available			
	NSO	MOL	NVTA/B/C	NVTI
1. Philippines			✓	
2. Indonesia	n.a./decentralized			
3. Hong Kong	✓			
4. India	n.a./decentralized			
5. China	n.a./decentralized			
6. Viet Nam	✓			
7. Korea	✓			
8. Singapore	✓			
9. Malaysia		✓	✓	
10. Brazil		✓		✓
11. Argentina		✓		
12. Chile	✓ (participation)	✓		
13. Peru		✓		✓
14. Colombia	✓ (participation)			✓
15. Costa Rica	✓			
16. Guatemala	✓			
17. T & Tobago		✓ (participation)		
18. Barbados			✓	
19. Jamaica		✓	✓	
20. Dominican Republic	✓			
21. Mexico	n.a			
22. Syria	✓			
23. Turkey	✓			
24. Jordan	✓			
25. Botswana	n.r.			
26. Cameroon		✓ (expenditure)		
27. Egypt	✓ (participation)			
28. Tunisia	✓			
29. Burkina Faso	n.r.			
30. Zambia	✓			
31. Mauritius			✓	
32. South Africa		✓		

Figure 4



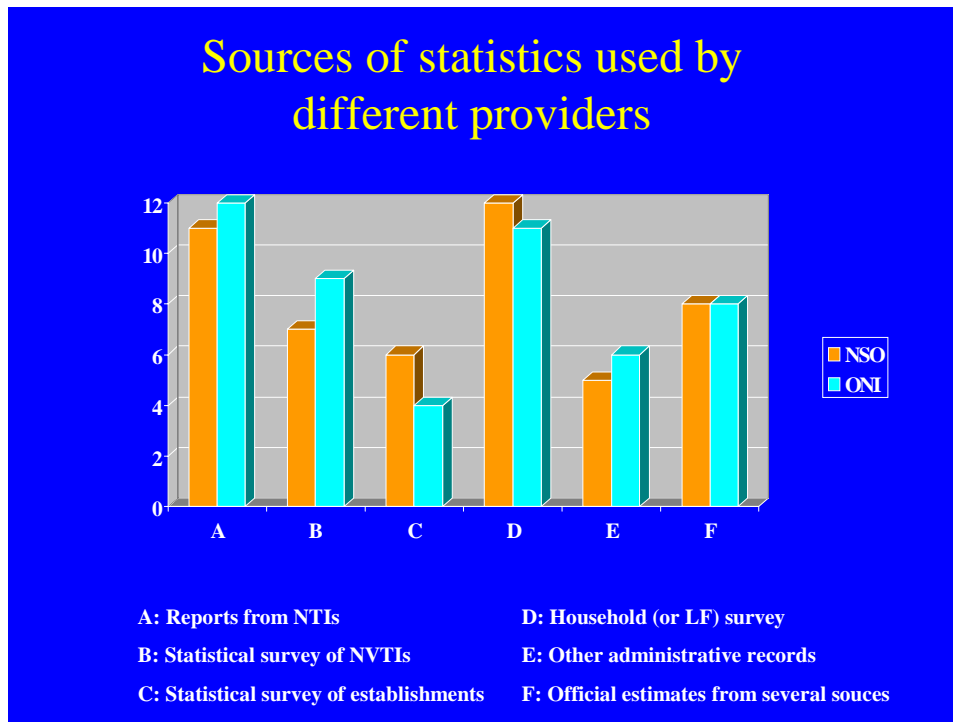
The role of the NVTB/C is primary in those countries in which this is the institution responsible for VET activities as provider, financier and regulator. This is the case of Mauritius,⁶ Barbados⁷ and the Philippines.

An interesting difference between the providers of data is the sources of statistics most used. In the case of the NSOs, household surveys were the principal source of data. In the case of the other institutions contacted, the most reliable source of information was the reports from training institutions (Figure 5). This indicates that the other institutions, i.e. the NVTB/C and the MOL, employment or human resources are the relevant authority in that particular country, and therefore, the institution that should have an interest in gathering statistics on expenditures and participation in training. However, these reports were the second most important source of information used by the NSOs as the household surveys were for the other institutions mentioned. As suggested by the evidence, these two seem to be the most important sources of statistics on investment in training available.

⁶ This role has recently changed. In the recent 2002-3 budget speech, the government decided to set up a National Training Fund which would be responsible for the management of the training levy. The IVTB will become a provider of training (Joosery, P.K., 2002, Financing Training in Mauritius, paper prepared for the International IVETA Conference, 21-24 July, Mauritius).

⁷ In Barbados, the Technical and Vocational Education and Training Council (TVET), established in 1994, operates under the Ministry of Labour and Social Security. The Council manages the employment and training fund, which provides among other things, financial assistance such as grants and loans for training and skills upgrading, and support to training programmes for retrenched workers and self-employed persons. The fund draws on a 1 per cent levy tax drawn 0.5 per cent from employees and 0.5 per cent from employers (Garmedinger, G.: "Trends in Skill Recognition and Certification: The role of competency-based training frameworks from the Caribbean perspective", paper submitted to the technical workshop "Strengthening National Vocational Training Policy", organized by ILO/Turin, OECD, CINTERFOR/ILO and ILO Caribbean Office, Saint Lucia, 10-13 September 2002).

Figure 5

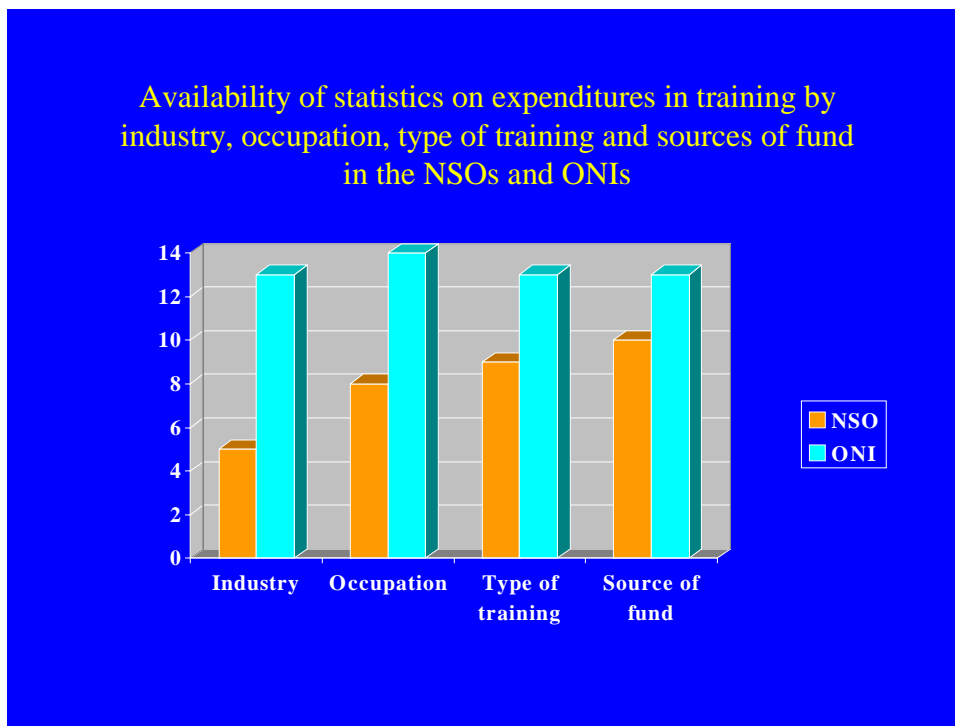


Statistical surveys of establishments are one of the lesser sources of statistics used by both kinds of respondents which corroborates the need for conducting specific surveys on enterprises' expenditures and participation in training activities. Recent research has shown the importance of employer-provided training. In England, for instance, around nine out of every ten employees provided some of their employees with either off-the-job training or OJT in the previous 12 months.⁸ Moreover, systematic and comparable statistics on enterprise investment in training activities is a key tool to analyse, among other things, the comparative advantage of using enterprises' own resources or external providers, and to identify the need for new sources and methods of funding. Therefore, such surveys are an important source of information on investment in training and, if inexistent, must be generated.

Another interesting difference between the statistics provided by the different sources is related to data on expenditures by industrial sector (Figure 6). Very few NSOs indicated that they could supply this information, 5 out of 12. However, most of the other institutions contacted reported having this data. Specifically, out of the 12 countries where other institutions have information on expenditures, 10 said that they could provide the data and, in some countries, more than one institution replied positively. In terms of information on expenditure by type of training and sources of funds the situation is similar. Almost all the relevant ministries or national vocational agencies or institutions surveyed can provide this information with the exception of just two countries in both cases.

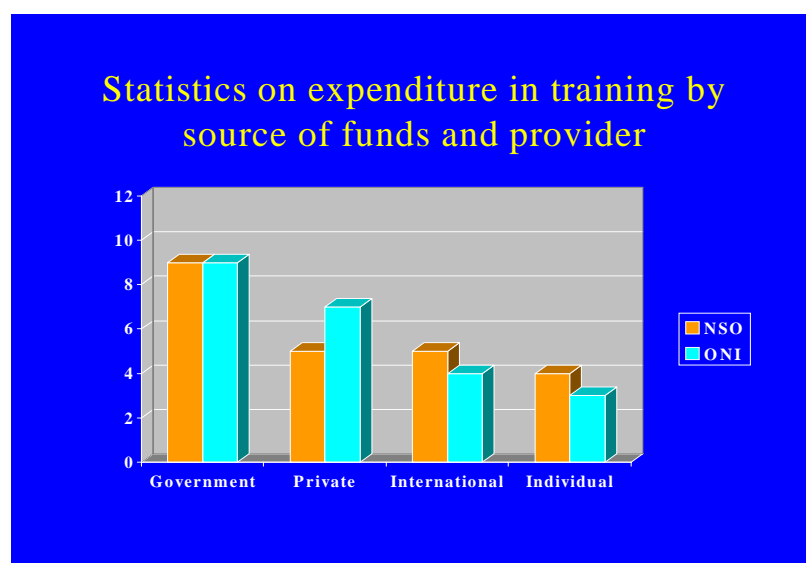
⁸ Clarke, A. (2002): "Who trains? Employers' commitment to workforce development", *Labour Market Trends*, The Stationery Office, Norwick, June, pp. 319-324.

Figure 6



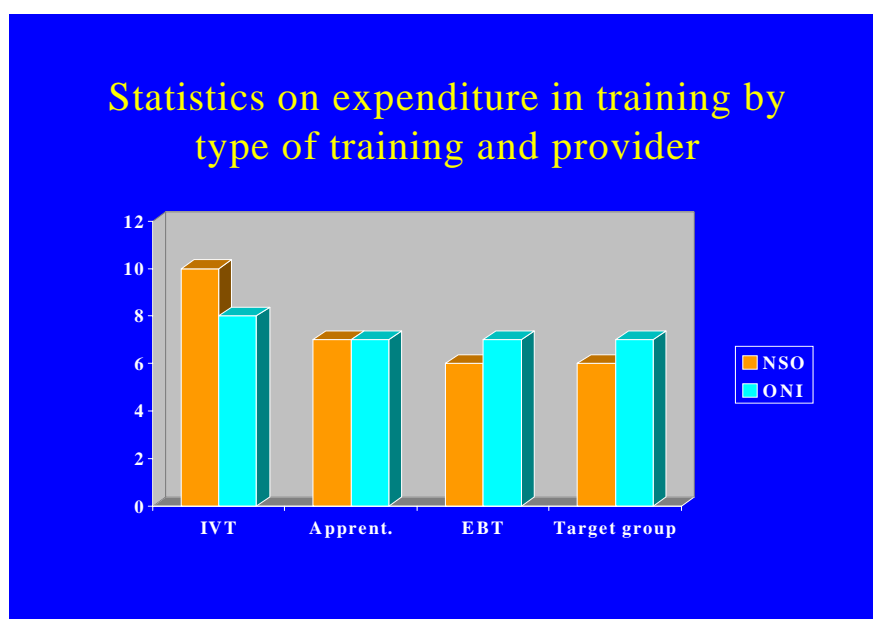
Information on public expenditures in training can be obtained either from the NSOs or from the other relevant institutions surveyed. The least available information from both kinds of providers is individual expenditures on training. Private investment in training, when available, seems to be more accessible through the ministries concerned and the national VET agencies than through the NSOs. Information from both providers on this kind of fund could be obtained only for half of the 24 countries that indicated having statistics on expenditures in training available (Figure 7).

Figure 7



Reasonably available in the NSOs are statistics on expenditures in (initial or continuous) vocational training offered by institutions other than establishments (Figure 8). On this point, 10 out of 12 countries reported positively. Information on expenditures in EBT could be obtained in seven countries by the ONIs and in six countries by the NSOs, i.e., 13 out of the 24 countries/institutions that indicated they had statistics available on expenditures in training replied. The same is applied to information on expenditures in training for specific target groups. Information on expenditures in apprenticeship is available in seven countries in both sub-samples.

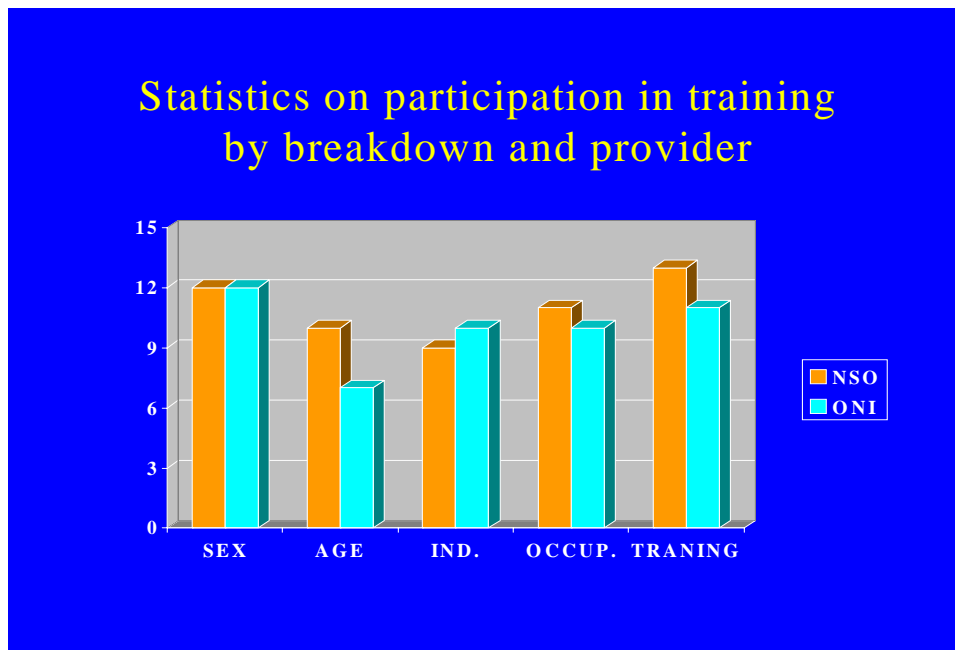
Figure 8



Regarding participation in training, statistics seem to be available in 25 countries of the whole sample from both providers of information, being 15 in the sub-sample of countries, which NSOs replied, and 12 from the remaining countries where ONIs were contacted.⁹ These statistics can be provided in breakdown by sex in 12 countries in both cases, i.e., all the ONIs surveyed indicated that they collect this data. Information on statistics on participation by type of training seems also to be widely gathered, principally by the NSOs. Data on participation rate by occupation and industrial sector of the trainees' main job is also available in more than half of the sample and from both kinds of providers. The less accessible data is on participation in training breakdown by age of trainee. Only seven ONIs informed that they could provide the information, which corresponds to over 50 per cent of the institutions that replied positively to this question. Overall, statistics on participation in training are generally available and can be obtained in one way or another in the majority of respondent countries (Figure 9).

⁹ Countries like Chile and Colombia were included in both sub-samples and information obtained from both suppliers. They have been counted twice.

Figure 9

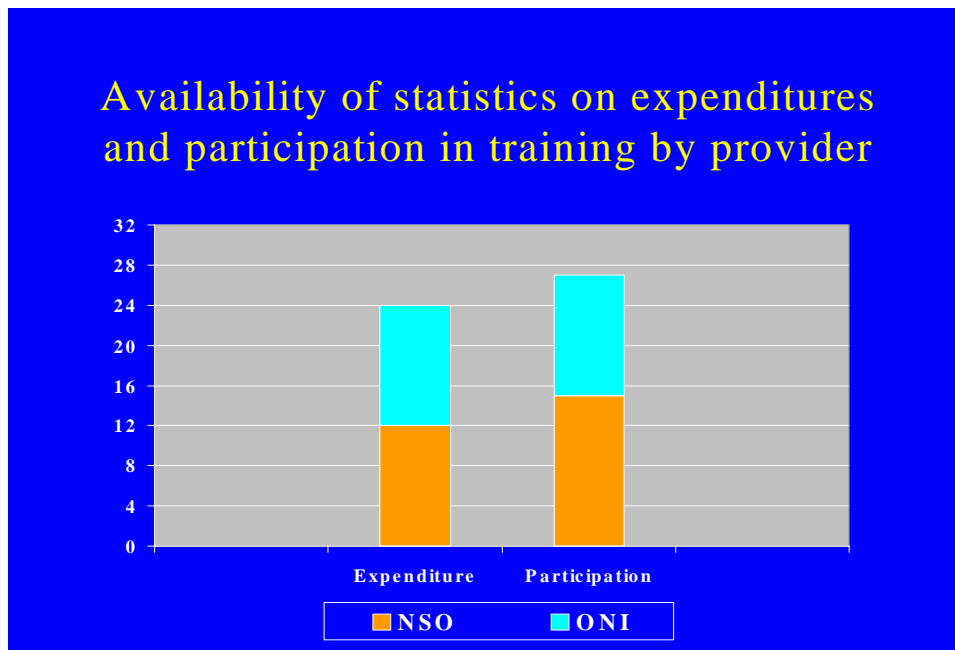


All these differences point out the complementary role of the different sources of information. This realization does not make the collection and analyses of these statistics any easier. On the contrary, it indicates that we will have to rely on more than one source of information at the national level and cope with mismatches of indicators. The same burden is applied to envisaged international comparisons.

6. How can we access the information when available and where?

From the above assessment of the potential of each provider of statistics and information on expenditures and participation in training, we saw that among the 32 countries that replied to the questionnaire, data on expenditure can be obtained in 24 countries, half of them through the NSOs, and the other half through the ONIs. On participation in training, 15 NSOs/countries can provide the information and, in another 12 countries ONIs are able to supply them (Figure 10).

Figure 10



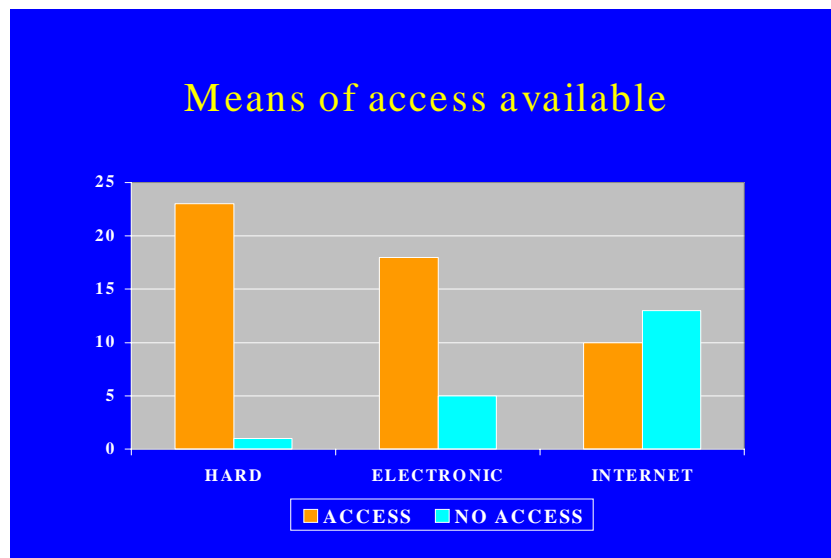
The specific sources of information on statistics on participation and expenditures in training are identified in the next Table. See Annex 2 for the contact person in each institution by country.

Among the 23 countries surveyed that indicated the means of access to their data collection, 22 informed that statistics could be obtained in hard copy. This is the only accessible means in the case of Viet Nam, Barbados and Cameroon. The Dominican Republic did not mention hard data availability, but the possibility of offering the data electronically. On this means of access to data, 18 countries and/or institutions are equipped, but Viet Nam, Costa Rica, Chile, Trinidad and Tobago, Barbados and Cameroon pointed out that they do not count on this means of disseminating information. It seems that the limitation in access of information is more acute in the countries and institutions of the Asia and Pacific region, which in this sample includes three Middle-East countries. In the LAC region, 4 out of 11 countries cannot provide data electronically. In Africa, from the five countries that replied to this question, Cameroon said that only hard data is available. In terms of access to data through Internet, only 10 countries in the whole sub-sample can supply information through this means, i.e. four countries from the Asia and Pacific region and six from LAC (Figure 11).

Table 16: Sources of information on statistics on participation and expenditures in training by country

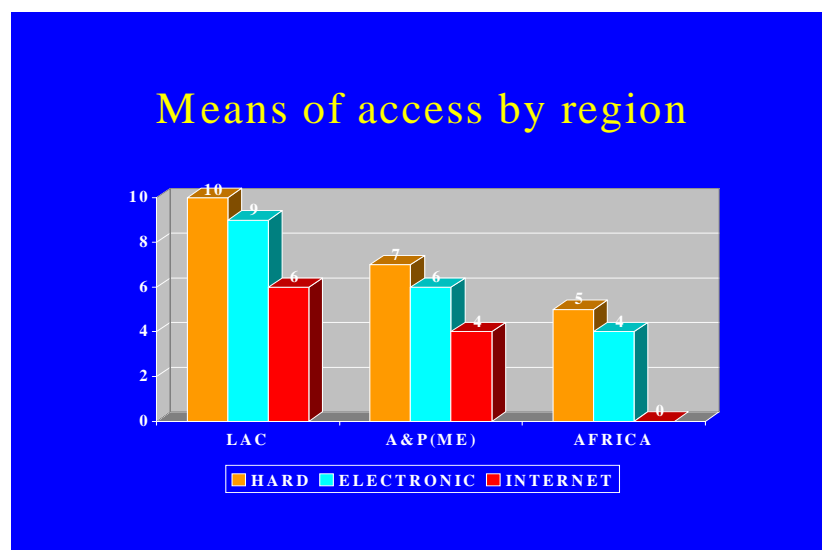
Country	EXPENDITURE				PARTICIPATION			
	NSO	MOL	NVTA/ B/C	NVTI	NSO	MOL	NVTA /B/C	NVTI
1. Philippines			✓				✓	
2. Hong Kong	✓				✓			
3. Viet Nam	✓				✓			
4. Korea	✓				✓			
5. Singapore	✓				✓			
6. Malaysia		✓	✓			✓	✓	
7. Brazil		✓		✓		✓		✓
8. Argentina		✓				✓		
9. Chile		✓			✓	✓		
10. Peru		✓		✓		✓		✓
11. Colombia				✓	✓			✓
12. Costa Rica	✓				✓			
13. Guatemala	✓				✓			
14. T & Tobago						✓		
15. Barbados			✓				✓	
16. Jamaica		✓	✓			✓	✓	
17. Dominican R.	✓				✓			
18. Syria	✓				✓			
19. Turkey	✓				✓			
20. Jordan	✓				✓			
21. Cameroon		✓						
22. Egypt					✓			
23. Tunisia	✓				✓			
24. Zambia	✓				✓			
25. Mauritius			✓				✓	
26. South Africa		✓				✓		

Figure 11



African data cannot be accessed through Internet. Four countries from the Asia and Pacific region, e.g., Hong Kong/China, the Republic of Korea, the Philippines and Singapore can provide statistics through the three means of access. The same is valid for Brazil, Argentina and Guatemala. Therefore, accessible information through Internet is concentrated in the countries that seem to have good collection and storage facilities, as proved by the availability of other means of access as well. Apart from these, only three other countries from the LAC region, e.g., Costa Rica, Chile and Trinidad & Tobago indicated as having capacity to provide data via Internet. As illustrated in the next figure, statistics available could be obtained mainly in hard form, but also electronically in most cases. It is clear that at the regional level, Africa is the region where less data on expenditures and participation in training is collected, available and accessible through any of the means inquired.

Figure 12



7. Conclusions

Out of the 32 countries in which National Statistical Offices (NSOs), Ministries of Labour (MOLs) and/or National Vocational Training Institutions (NVTIs) were addressed by the questionnaire, only six countries were unable to provide the information requested. Therefore, in this pilot exercise, we managed to obtain information on statistics on investment in training from 26 countries, i.e. about 80 per cent of the sample. Among those that did not reply are the African countries Botswana and Burkina Faso. In both cases, the respective NSOs do not have the statistics and the Other National Institutions (ONIs) contacted did not reply, the same was the case of Mexico. The Asian countries in the sample from which information was not accessible are India, Indonesia and China. In the first two cases, statistics are decentralized and kept by the relevant institution at the regional and local level. In the latter, the national indicators of training expenditures and participation used did not match those requested in the questionnaire.

Summing up, from the countries addressed by the questionnaire in the Asia and the Pacific region and the African region, only half of them could provide the information requested. However, in the case of the Asian and the Pacific countries, statistics on investment in training could be made available through an additional effort of collecting the dispersed data. Although they are not available they appear to be accessible. In the African case, six countries of the sample simply did not reply to the questionnaire, which seems to indicate that in those cases the data required is neither available nor accessible, therefore it has to be generated. As it was noted, many African countries do not have a sound statistical basis on which to fully assess the employment and poverty situation in general, and even less on vocational training issues in particular.¹⁰ This situation is attributable to the persistence of inadequate capacity to generate the information and do the analysis. The lack of technical expertise, equipment, and financial resources are additional constraints. These countries need to develop a long-term information gathering strategy and strengthen their capacity to regularly collect, process, analyse, use and disseminate the information in order to improve the scope, quality and relevance of the statistics produced and/or required.

On the statistics on participation and expenditures in training available in the 26 countries that responded positively to the inquiry, data can be obtained from two major providers: (i) the NSOs and (ii) other relevant national institutions, i.e., ministries of labor and/or employment and human resources development or manpower, national vocational training agencies/boards/councils (NVTAs/B/Cs), and NVTIs. In some countries data is only available in one of the providers and in others both of them, including different institutions. In our sample, statistics could be supplied by the NSOs in 15 countries. Unfortunately, in three countries statistics were available on participation in training only. In some countries, it was the MOL, employment or human resources that could provide statistics on expenditures and/or participation in training. In one case the statistics available were on expenditures only and, in another on participation. In others, the respective NVTAs/B/C was the supplier of such statistics on both expenditures and participation in training. Data on expenditures and participation in training from NVTIs was collected, and is available, in three countries of the sample.

¹⁰ ILO/Abidjan (2001): "Improving the Quality of Labour Market Statistics and Strengthening the Management of Labour Market Information and Poverty Monitoring Systems in Africa", a project proposal submitted to the African Capacity Building Foundation.

From the evidence described, it is clear that every provider has its limitations and data need to be complemented by different sources. In some cases the information available at the NSO was complemented by the one provided by the MOL and, in others, by the NVTIs. However, the information provided by the latter seemed to be redundant and duplicated by that supplied by the MOL. This is the case of countries in which the NVTI is subordinated to the MOL as in the majority of the Latin American countries. The evidence suggests that the NSOs and the ministries responsible for vocational training policies and programmes are the primary sources of statistics on expenditures and/or participation in training. Data from the NVTIs seems to be a secondary source of statistics, and used in addition to information offered by the ministries or NSOs. Information can be complemented by the NVTA/B/C as well but, in those countries in which it is the institution responsible for Vocational Education and Training (VET) activities as provider, financer and regulator, it becomes the primary provider. These sources of statistics are, therefore, not mutually exclusive. On the contrary, they are complementary to each other. This complementary role needs to be explored in order to access the data that, unfortunately, is not systematically collected nor centralized.

In terms of the sources of statistics used by the providers, there are at least six major sources through which these statistics can be produced. However, the evidence indicates that household of Labour Force (LF) surveys and the reports from training institutions to a relevant authority are the most important sources through which statistics on participation and expenditures in training are produced and, hence, accessible. They are used by both providers alike although with different ranking of importance. Household surveys are the principal source of information used by the NSOs, while the reports are the main reliable source of information to the ONIs. This evidence may suggest that the NVTA/B/C and the MOL, employment or human resources, are the relevant authority in that particular country, and therefore, the institution that should compile statistics on expenditures and participation in training for planning, regulating, monitoring and assessing training activities provided by themselves or other public/private institutions. These two sources will remain the major sources of statistics in the near future, as pointed out by the countries that intend to continue to collect and produce statistics on expenditures and participation in training.

Statistical surveys of establishments seem to be the least available source of statistics to both kinds of providers. This finding corroborates the need for conducting specific surveys on enterprises' expenditures and participation in training activities. The paucity of data on the amounts being devoted by companies to vocational training makes it hard to judge the prevailing situation, which they may be seeking to improve. Moreover, Enterprise Based Training (EBT) is regarded as being of growing importance both for individuals needing to update their skills and adapt to new ways of working, and for companies needing to maintain their competitiveness in global markets. Systematic and comparable statistics on enterprises investment in training activities is a key tool to analyse, among other things, the comparative advantage of using enterprises' own resources or external providers, and to identify the need for new sources and methods of funding. Therefore, such surveys constitute a means of encouraging countries and companies to increase current efforts to invest in training and, if inexistent, should be generated.

On statistics available on expenditures in training some patterns emerged. Very few NSOs indicated that they could supply data on expenditures broken down by the industrial sector of trainees' main job. However, most of the ONIs contacted reported having this data. On variables such as occupation, type of training and source of funds, the situation is similar,

although the gap between the number of NSOs and ONIs able to offer the information decreases from one to another. In these cases, the accessibility of the NSOs to statistics on these variables increases successively, being less acute on statistics relative to the sources of funds.

In terms of statistics on expenditures by different types of training, i.e., Institutional Vocational Training (IVT), apprenticeship, EBT and training directed to specific target groups, both providers seem to have relatively easy access to the information as it is available from more than half of the respondents. Among these variables, the least available data is on EBT but, even in this case, using information provided by both providers, more than half of the whole sample can offer the data. Statistics on these variables are more accessible than by different source of funds. Both providers of information seem to have relatively good access to public expenditures in general and very little information on individual expenses in training activities. Less than half of the sample can offer information on private expenditures in training, although it seems to be more accessible through other institutions involved with VET policy and programmes. With the exception of public expenditures, the others are only available in less than half of the countries surveyed.

Considering half of the sample as a benchmark, statistics on participation in training are relatively accessible from both providers of information, with a little advantage for the NSOs, especially on some variables such as age of trainee, occupation of trainees' main job and type of training activity.

Statistics, when available, can be obtained in hard copy. This is the most available means of access to all institutions surveyed in almost every country. Data can also be accessed electronically in most of the countries. The least available means of access is Internet. Just a few countries from the Asian and Latin American regions indicated that they have the capacity to provide data through this means. These are those countries that can provide statistics through the three means of access. Therefore, accessible information through Internet is concentrated in the countries that seem to have good collection and storage facilities as proved by the availability of other means of access as well.

Although these statistics are available, they do not seem to be requested very often. Among the institutions surveyed, only three NVTIs indicated that they provided information to regional and international organizations annually. Three other countries indicated that they submitted statistics once last year. This may be because the statistics available in specific institutions are related to their own training activities and coverage and, therefore, incomplete from an international perspective. Data need to be compiled and, then, supplemented with other statistics available if a coherent set of reliable information in this area is to be developed. It is, however, through the combination of providers and sources of statistics that the data envisaged can be produced. It seems also that a policy context that generates demand for such indicators as a central instrument for policy assessment and monitoring is critical to the production and collection of data. Access to valid and reliable statistics on expenditures and participation in training depends on cooperation between agencies responsible for the various elements which are involved in the formulation, implementation, description and analysis of policies and programmes related to vocational training, labour markets and the enterprises, households and individuals affected.

ANNEX 1



International Labour Office

INQUIRY ON STATISTICS ON INVESTMENT IN TRAINING

This inquiry is used to explore the availability
of statistics on expenditures and participation in training activities

*Please fill in the boxes and answer the questions by
marking the appropriate answer*

I. Identification

Country:

Agency:

Name:

Address:

Website:

Contact Person:

Name:

Tel.:

E-mail:

Fax:

If you have questions, please contact:
R. Galhardi Tel.:+4122/7997675; e-mail:galhardi@ilo.org

Skills Development Department
(IFP/SKILLS),
ILO
CH-1211 Geneva 22
Switzerland
Fax: +4122/7997650

II. Background

The General Conference of the International Labour Organization, meeting in its 88th Session, 2000, requested that the *“ILO should develop a database on current expenditures on vocational and continuing training, and suggest a series of benchmarks on investment in training, possibly differentiated for different regions of the world, size of companies or sector of industry”*(para.12).

This inquiry is designed to identify which kind of statistics on training expenditures are collected regularly in the member States, or at least once since 1990.

III. Definitions

For the purpose of the inquiry, training is defined as *formal, structured, work-related learning, and includes learning in formal and technical school programmes in training centres or institutes as well as in the workplace, both on- and off-the-job, for individuals in as well as outside the labour force*. Training undertaken as part of compulsory schooling or in preparation for further education should not be included, nor should training activities without any connection to current or possible future employment.

IV. Questionnaire

1. Are any statistics on training activities available, or can they be obtained, for at least one year for the period 1990-2002, from any of the following sources:

- | | | |
|---|------------------------------|-----------------------------|
| A. Reports from training institutions to a relevant authority | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| B. Statistical survey of NTIs | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| C. Statistical survey of (non-training) establishments | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| D. Household (or labour force) survey | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| E. Other administrative records not included in A. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| F. Official estimates based on several sources | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

2. Can statistics be provided for expenditures in training activities: ☐ Yes ☐ No

3. If the answer is "yes", can a breakdown be made by:

- | | | |
|--|------------------------------|-----------------------------|
| A. The industry in which those trained were working? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| B. The occupational situation of trainees (whether employed, unemployed or outside the labour force)? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| C. The type of training provided (e.g. IVT (initial/continuous), apprenticeship, enterprise-based training (EBT), etc.)? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| D. The source of fund used to finance the training (public, private, international, or regional/local, individuals, etc.)? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

4. If the answer to Question 3C is "yes", can a breakdown be made by:

- | | | |
|--|------------------------------|-----------------------------|
| A. IVT (initial/continuous) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| B. Modern apprenticeship | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| C. EBT (on-the-job /off-the-job) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| D. Training for specific target group (youth, unemployed, adult employed, women, disabled, etc.) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

5. If the answer to Question 3D is "yes", can a breakdown be made by:

- | | | |
|---|------------------------------|-----------------------------|
| A. Government expenditures (central, regional or local/provincial) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| B. Private expenditures (enterprises, sectoral organizations, etc.) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| C. International agencies/foreign sources | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| D. Individual/trainee expenditures | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

6. Can statistics be provided for enrolment in training activities? ☐ Yes ☐ No

7. If the answer is "yes", can a breakdown be made by:

- | | | |
|---|------------------------------|-----------------------------|
| A. Sex of trainees | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| B. Age group of trainees | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| C. Industry of trainees' main job | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| D. Occupation of trainees' main job | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| E. Type of training undertaken (as in 3C) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

8. Has your office provided any statistics of the type described above to regional or other international organization (s)? ☐ Yes ☐ No

9. If the answer is "yes", please give the details for the last submission

- A. Month/Year:
- B. Name of receiving institution:
- C. Address:
- D. Contact Person:
- E. E-mail:
- F. Telephone/Fax no:

10. Could the ILO obtain the statistics available in any of these forms:

- | | | |
|----------------------|------------------------------|-----------------------------|
| A. Hard (paper) copy | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| B. Electronic format | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| C. Internet/Web | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

11. If “yes” for the Internet/Web option in Question 10, please provide the Internet/Web site address.....

12. If “no” to all alternatives, please explain why.....

13. Are there plans to collect and produce statistics on expenditures and/or enrollment of training in the near future (2002 or 2003)? ☐ Yes ☐ No

14. If the answer is "yes", from which type of source as listed above under Question no. 1:

- | | | |
|---|------------------------------|-----------------------------|
| A. Reports from training institutions to a relevant authority | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| B. Statistical survey of NTIs | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| C. Statistical survey of (non-training) establishments | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| D. Household (or labour force) survey | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| E. Other administrative records not included in A. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| F. Official estimates based on several sources | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

15. Please add any comments and/or information that you think will be useful.

THANK YOU VERY MUCH FOR YOUR COLLABORATION

ANNEX 2

LIST OF PROVIDERS OF INFORMATION BY COUNTRY

Country	2 Provider of Information	Contact person and numbers
Argentina	Ministerio de Trabajo, Empleo y Seguridad Social Subsecretaria de Orientación y Formación Profesional Website : www.trabajo.gov.ar	Arq. Gustavo Gandara Director Nacional Tel: 54.11.4310 5834 Fax: 54.11.4310.5835 E-mail: ggandara@trabajo.gov.ar
Barbados	Technical and Vocational Education and Training Council 7, Chelwood 8 th Avenue, Belleville, St. Michael, Barbados	Mr. Trevor King Tel: 240-435-3096 Fax: 246-429-2060 E-mail: Office@tvetcouncil.com.bb
Brazil	Servico Nacional de Aprendizagem Industrial (SENAI) SBN Quadra 1, Bloco C, Edf. Roberto Simonsen, 5 andar CEP 70040-903, Brasilia-DF Ministerio de Trabalho e Emprego Brasilia-DF Website : www.mte.gov.br	Francisco Jose Goncalves Abreu Tel: + 55 61 317-9781 Fax: + 55 61 317-9839 E-mail: copea@dn.senai.br Nassim Gabriel Mehedeff Tel : +55 61 2236324 Fax: +55 61 224 7593 E-mail: nassimg@mte.gov.br
Cameroon	Ministry of Economy and Finances Department of Statistics and National Accounts	n.a.
Chile	Servicio Nacional de Capacitación y Empleo (SENCE) Huérfanos 1273 piso 11 Santiago, Chile Instituto Nacional de Estadísticas Vicuna Mackenna 11s Website : www.ine.cl	Raúl Ulloa Flaíne Tel: 56-2-8706178 Fax: 56-2-6983739 E-mail: rulloa@sence.cl Maria Jesús Silva Tel : (56-2) 222 65 29 Fax : (56-2) 665 79 04 E-mail : mariajesussilva@ine.cl
Colombia	Servicio Nacional de Aprendizaje (SENA) Calle 57 no. 8-59 Bogota DF Departamento Nacional de Planeación Calle 26 no. 13-19, Edificio Fonade Bogota D.C. Website: www.dnp.gov.co	Orvidio Velandio Niño Tel: 594 2019 Fax: 546 1550 E-mail: ovelandio@sena.edu.co Dr. Patricia Camacho Subdirectora de Educación Tel: 571-5960300 ext 2020 Fax: 571-59999539 E-mail: pcamacho@dn.gov.co
Costa Rica	Instituto Nacional de Estadística y Censos (INEC) Avenida 6, calle 0, Edificio Rex, San José Website: www.inec.go.cr	Marita Begueri Pages Tel: 221-96-56 Fax : 223-08-13 E-mail : inecinfo@racsa.co.cr

Dominican R	Oficina Nacional de Estadística, ONE Av. Leopoldo Navarro, Esq. Av. México, Edif. Juan Pablo Duarte, 9no. Piso Website: www.one.gov.do	Lic. Ramona Martínez de Rodríguez Coordinadora Técnica Tel : 682-7777, ext. 237-238 Fax : 687-3747 E-mail : Asesoria@one.gov.do
Egypt	Central Agency for Public Mobilization and Statistics (CAPMAS) Salah Salem St., Narr city, Cairo	Mohamed Ashraf Badr Under Secretary of CAPMAS President Office TeL. (202) 40 21 320 Fax: (202) 40 24 099
Guatemala	Instituto Nacional de Estadística 8a., Calle 9-55, Zona 1. Edificio América	Ing. Jorge Ernesto Herrera López Tel : 2326136 ; 2382587 Fax : 2324790 E-mail : gerenciaconcyt.gob.gt
Hong Kong, China	Census and Statistics Department 21/F, Wanchai Tower, Wan Chai, Hong Kong, Website: www.info.gov.hk/censtatd/	Ms. Edith CHAN, Statistician (General) 1A Tel: 852-2582 4731 Fax: 852-2827 1708n calma. E-mail: gla_1@censtatd.gov.hk
Jamaica	Planning Institute of Jamaica 10-16 Grenada Way, Kingston 5 Website: www.pioj.gov.jm HEART Trust/National Training Agency 6B Oxford Road, Kingston 6 Website: www.heart-nta.org	Steven Kerr TeL: 876-906-4463 Fax: 876-906-5031 E-mail: socplan@mail.colis.com Thomas McArdle Tel : 876-960-9670 Fax : 876-960-9486 E-mail : Thomas_mcardle@heart-nta.org
Jordan	Department of Statistics PO Box 2015 Amman 11181 Jordan Website: www.dos.gov.jo	Dr. Hussein Shakhathreh Tel : 00962-6-5300700 Fax: 00962-6-5300710 E-mail : hshakhathreh@dos.gov.jo
Malaysia	Manpower Department (Jabatan Tenaga Rakyat) Paras 6, Blok D4, Parcel D, 60502 Wilayah Persekutuan, Putrajaya Website: www.jtr.gov.my	Mr. Ghalip B. Spahat Tel: 03-88865429 Fax: 03-88892417 E-mail: ghalips@yahoo.com
Mauritius	Industrial and Vocational Training Board IVTB House, Point Fer, Phoenix Website: www.ncb.intnet.mu/ivtb.htm	Mr. P K Joosery Tel: 601 8000 Fax: 698 4200 E-mail: pjoosery@ivtb.intnet.mu
Peru	Ministerio de Trabajo y Promoción del Empleo Av. Salaverry 655 Jesús Maria Lima, Perú Website : www.mtps.gob.pe Servicio Nacional de Adestramiento en Trabajo Industrial (SENATI) Autopista Panamericana Norte, Km 15,200 Independencia, Lima	Eco. Elizabeth Cornejo Maldonado Tel: 01-433 2512 Anexo 2108 Fax: 01-425 1255 E-mail: dnefp@mtps.gob.pe Ing. Guillermo Salas Donohue Tel: 01-533-4485 Fax: 01-533-5240 E-mail: senati@senati.edu.pe

Website: www.senati.edu.pe		
Philippines	Technical Education and Skills Development Authority TESDA Complex, East Service Rd, South Super Highway, Taguig, Metro, Manila Website: www.tesda.org	Ma. Susan P. Dela Rama Executive Director Planning Office Tel: 893-1966 or 817-4076 to 86 loc.613 Fax: 893-1966 E-mail: mspdelarama@tesda.org
Republic of Korea	National Statistical Office Government Complex Building III no. 920, Dunsan-dong, Seo-gu, Daejeon 302-701 Website: www.nso.go.kr Training Policy Division/Ministry of Labour Chungang-dong 1, Kwachon-city, Kyunggi-do Website: www.molab.go.kr	Mr. Han-kyeung Choi Deputy Director International Cooperation Division Tel. 82-42-472-2615 / 481-2095 Fax: 82-42-481-2465 Pyun, Do-in Tel: 82-2-503 9754 Fax: 82-2-504 2039 E-mail: hrd003@chollian.net
Singapore	Manpower Research and Statistics Department 18 Havelock Road no. 06-02 Singapore 059764 Website: www.mom.gov.sg	Tan Yih Bin Tel: 65-65395006 Fax :65-65395004 E-mail : Tan_yih_bin@mom.gov.sg
South Africa	Department of Labour 215 Schoeman Street, Pretoria, SA	Ian Macun Tel: +27-11-309 4047 Fax: +27-11-309 4237 E-mail: ian.macun@labour.gov.za
Syria	Central Bureau of Statistics Damascus, Abu Rumaneh. Nizar Kahbani Str.	Dr. Ibrahim Ali Director of CBS Tel: 3335030,1,2,3 Fax: 3322292 E-mail: cbs@mail.sy or cbs@scs-net.org
T&Tobago	Ministry of Labour and Small and Micro Enterprise Development Riverside Plaza, Besson Street, Port-of-Spain Website: www.labour.gov.tt	Lydia Ali Tel: 868-623-0405 Fax : 868-624-4091 E-mail : rplann@tsstt.net.tt
Tunisia	Ministère de la Formation professionnelle et de l'Emploi 10, Rue Ouled Haffouz 1006 Tunis	Mc. Ali Hamdi Directeur Général Tel : (216) 71 798-653 Fax : (216)71 794-615
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