

# **Workforce Development Strategies**

## **METHODOLOGY GUIDE**

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**TABLE OF CONTENTS**

**I. Purpose..... 2**

**II. Workforce Development Strategies Team Roles and Responsibilities ..... 3**

**III. Cluster Screens ..... 12**

**IV. Research Collection Methods ..... 12**

**IV. Sources of Information ..... 16**

**V. Cluster Research: Demand Side ..... 17**

**VI. Cluster Research: Supply Side..... 20**

**Appendix A: Additional Workforce Diagnostic Tools..... 22**

**Appendix B: Demand & Supply Side - Format for Sourcing Desk Research ..... 24**

**Appendix C: Demand & Supply Side Interview Guides..... 29**

**Appendix D: Deliverable Style Guide..... 46**

## I. Purpose

The USAID Workforce Diagnostic and Strategic Planning Tool was designed by PricewaterhouseCoopers in 1998 for USAID's Workforce Development Coalition. This committee is headed by the Center for Human Capacity Development with members from Economic Growth, Democracy and Governance, and the Women in Development Office. Since its creation, the methodology was piloted in South Africa and implemented in Egypt and now Sri Lanka

Throughout this process, the PwC Workforce Development Strategies (WDS) Team has designed numerous tools and processes to implement the Workforce Diagnostic. The purpose of this document is to attempt to capture many of these tools and processes on paper to assist in replicating the process worldwide.

## II. Workforce Diagnostic Executive Summary

What factors account for job growth and worker productivity? How can workforce development help or hinder competitiveness?

Countries throughout the world are seeking solutions to these tough workforce questions. Sri Lanka is no exception. Despite a highly literate (91%), relatively well educated population, Sri Lanka has an unemployment rate of 11 percent, which would increase to approximately 35 percent if unofficial underemployment were included. Youth between the ages of 15 and 29 make up 82 percent of the unemployed. Issues of this type threaten to destabilize markets and reducing prospects for growth.

Clearly promoting improvements to the “enabling environment” for business — loosening bureaucratic restrictions, sweeping away rules that promote insularity, promoting policies that encourage risk-taking entrepreneurs, while minimizing the costs of failure, for example could improve these results.

Our experience, however, indicates that these changes may not be enough. Sri Lanka must also recognize that policies that promote workforce flexibility, adaptability and innovation are at the heart of improved productivity and job growth. Actions that support the development of an adaptable workforce, with the skills necessary to support the dynamic requirements of a competitive economy, are critical to an industry’s ability to build and sustain competitiveness in the global marketplace. Market growth, political stability, and prosperity require workforce development strategies that are inclusive and equitable, opening new opportunities for groups such as women, ethnic minorities, and the poor.

What programs will foster and promote workforce flexibility and adaptation? How can industry and educational authorities cooperate to create relevant training programs and opportunities? What role can governments, industry, educators, and NGOs play in the development of relevant and sustainable workforce development strategies? What mechanisms are needed to broaden access to these programs and opportunities?

### The Workforce Diagnostic: Linking Workforce Development to Competitiveness

The Workforce Diagnostic is a tool designed to help policy-makers, educators, and industry stakeholders understand how competitiveness and workforce development are linked in a sector. It is a tool to generate productive dialogue among the stakeholders, leading to actions and commitments that strengthen the linkages between the needs of industry and workforce development policies, to the benefit of both.

The Workforce Diagnostic is:

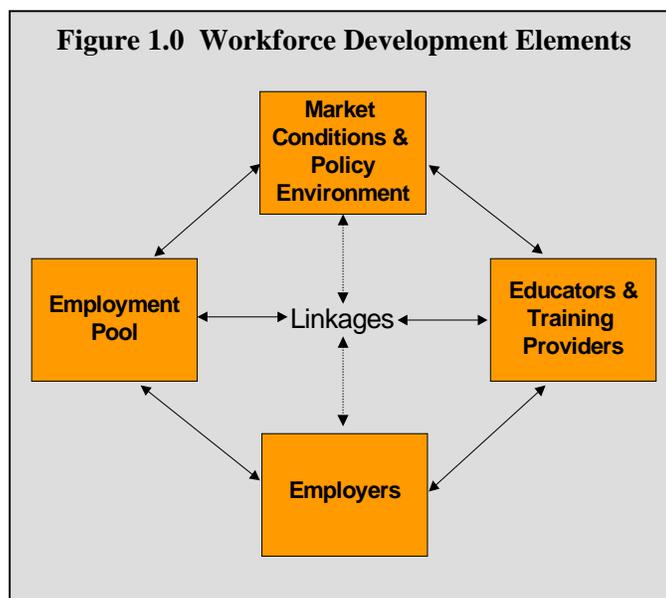
- Focused on industry clusters,
- Self-winding,
- Flexible and adaptable to local needs, and
- Linked to the development of **solutions** and **actions**.

Just as countries are diverse, the workforce development issues will vary throughout a country. As a result, the Workforce Diagnostic does not analyze the entire economy. Rather, it focuses on distinct industry clusters that share common characteristics.

### *Focused on Industry Clusters*

An industry cluster is a collection of interconnected companies and institutions that rely upon one another to achieve and sustain competitiveness. An industry cluster, therefore, contains not just the relevant industry members, but also supporting institutions such as educators, training providers (affecting the supply of human capital), suppliers, distribution and transport companies, and financing organizations serving the industry.

By focusing on the cluster as a whole, we address the range of challenges facing each industry. Cluster analysis can be used to identify a wide-range of strengths and constraints to competitiveness. However, within the context of the Workforce Diagnostic, this cluster tool is focused solely on the human capital factors affecting competitiveness.



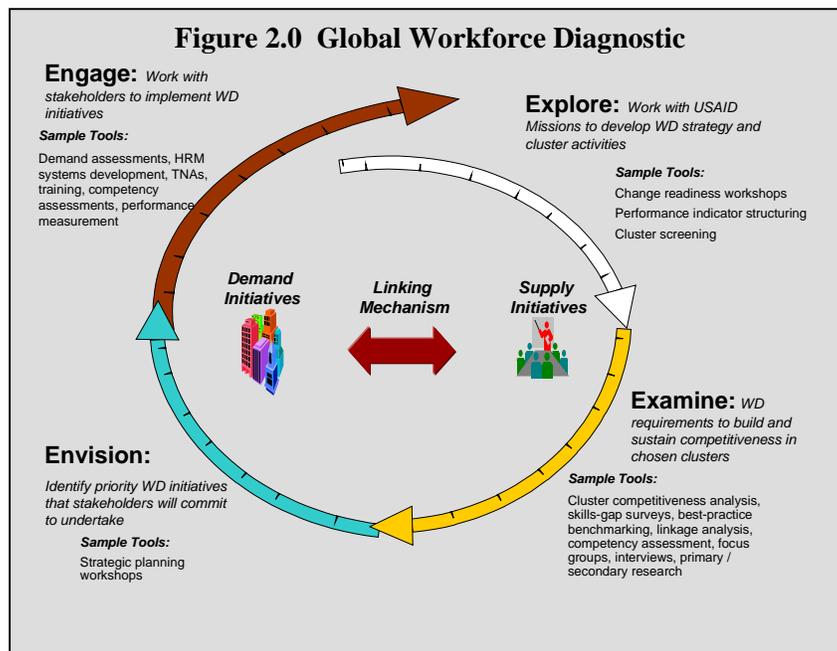
The Workforce Diagnostic focuses on developing institutional linkages. The Diagnostic analyzes workforce development needs and policies in a cluster in terms of the following elements: employers, employment pool, educators/training providers, all within the context of the present market conditions and policy environment. (See *Figure 1,0 Workforce Development Elements*). The overarching objective is to create and sustain the linkages between the four elements within a cluster.

The Workforce Diagnostic provides a **methodology** for systematically

evaluating the degree of alignment between what the market demands, employers require, training providers offer, and what the labor pool brings in terms of skill endowment. By looking at each of these elements, industry, policy-makers, educators, training providers, and actual and potential employee representatives can better visualize and evaluate options for improving workforce adaptability to changing requirements.

### *A Self-Winding Process*

The Workforce Diagnostic is a **process**, not just a product. It is designed to create a common understanding among industry players, educators, training providers, and policy-makers regarding the key workforce development issues affecting competitiveness in an industry cluster. This shared vision sets the stage for stakeholders to initiate actions that support the overall competitiveness of the industry cluster.



The Diagnostic process can be visualized as an evolving spiral. The spiral consists of four stages. Once the final stage has been completed, the first begins again. However, stakeholder participation is crucial in each stage. All of the stages employs a specific set of analytic and dialogue management tools. Each stage produces an output. The output from one stage provides the basis on which the subsequent stages will be built. (See Figure 2.0)

### ***Flexible and Adaptable to Local Needs***

The Workforce Diagnostic is a flexible methodology. Depending on the current strength of the cluster, and the amount of analytical work already carried out in a country, the Workforce Diagnostic methodology allows for flexibility in terms of the type of analytic and dialogue management tools that are applied and the work undertaken at each stage.

For example, some clusters may have completed a separate in-depth analysis of each of the cluster's competitiveness. What is lacking may be the ability or initiative to put the findings of this research effort into a compelling set of discussion points, with the ultimate objective of generating industry-educator dialogue on specific workforce development actions. In this case, the Workforce Diagnostic may start by reviewing and simply updating assessments carried out previously, and move directly into the Envision stage, in which much of the dialogue takes place. It then incorporates the findings from the analysis into a strategy for raising industry-training provider and other stakeholder awareness, and establishing stakeholder commitment to that workforce strategy.

The four stages in the Workforce Diagnostic, and the analytic and dialogue management tools that are part of each stage, are described briefly below.

### **Explore**

The objective of the **Explore** stage is to identify the issues and clusters in which the Workforce Diagnostic process will focus. Sample tools used in this stage will include primary and secondary research, statistical analysis, and policy reviews in an attempt to answer the following questions. (Listed under each question are examples of issues that may result from this research.)

- ***What are current trends and issues in the country affecting competitiveness?***  
Industry retrenchment, population booms, unemployment crisis, wars, etc.
- ***What are current workforce development issues?***

Policies, legislation, trade, legal implications, new funding, shifts in employees, portability of skills, curriculum changes, equity initiatives, wage structures, etc.

- ***Who is talking and thinking about workforce development issues?***  
Thought leaders, community leaders, stakeholders in government, industry, labor unions, educational institutions, NGOs, PVOs
- ***What clusters meet the workforce criteria?***  
Potential for job creation, politically feasible, willingness of stakeholders, etc.
- ***Do these issues and clusters have critical enabling factors?***  
Political will, economic need, demand, desire for institutional change
- ***What are the appropriate clusters and issues to include in the Diagnostic process?***  
Which of these issues are realistic and doable?

The primary output at the end of this stage is an **agreement of scope**. This output designates the clusters of focus and identifies the pertinent issues for the remainder of the Workforce Diagnostic. It should also delineate the remaining outputs and deliverables, identify the critical stakeholders, and serve as a formal approval by financial backers of remaining tasks in the Workforce Diagnostic.

## Examine

During the **Examine** stage, the objectives are to (a) determine the workforce development requirements to gain and sustain competitiveness; and (b) evaluate how industry needs are presently being met. Throughout the Examine stage, the Workforce Diagnostic attempts to answer the following questions:

- ***What are the characteristics and quality of the cluster's present workforce development programs?***  
Communication and co-operation level among stakeholders
- ***What are some examples of present success stories within the cluster?***  
Organizations that have successful / quality programs
- ***What workforce development actions are necessary to gain and sustain competitiveness?***  
Skills development, increased technology training, job creation, hiring equity
- ***How does the labor force acquire the characteristics industry needs in order to sustain competitive advantage?***  
Curriculum responsive to market, continuing education in the workplace
- ***How do political, social, and economic factors affect the competitiveness of the clusters?***  
Help or hinder competitiveness
- ***What are the dynamics of the present stakeholder relationships and how do they affect workforce development?***  
Working together, efficient, lack of communication, bureaucratic, barriers or constraints

The sample tools used to answer these questions might include survey instruments, best practice benchmarking, contact groups, linkage analysis, and causal mapping. The final output of the Examine stage is a **cluster workforce development map**. This map identifies present workforce characteristics required by the cluster(s) and outlines factors affecting the development of these characteristics such as employer practices, educational or training establishment policies and practices, and stakeholder linkages and governance structures.

## Envision

Through increased stakeholder dialogue, the objective of the **Envision** stage is to share information from the analysis of the workforce development elements with stakeholders and agree upon actions for promoting workforce development in a manner that enhances competitiveness. Through this dialogue, the Envision stage pushes for answers to the following questions:

- ***What are the stakeholders' common strategic priorities?***  
Short-term vs. long-term; some not always quickly resolvable
- ***What actions will stakeholders commit to? Can we develop action plans to achieve common goals?***  
Digestible actions that stakeholders can tackle and see results
- ***Who will lead these commitments and actions?***  
Identify cluster stakeholders that will fulfill leadership roles
- ***What is the institutional setting available to take development forward?***  
Where in the political agenda can workforce development be inserted?  
How is this best done? Who needs to participate?

This stage is informed by the outputs of previous stages and uses strategic retreats to reach its final output – an **action vision**. This is an agreement on the analysis of the workforce development elements (the strengths and weaknesses of linkages pointed out). The action vision should build consensus on what are the stakeholder workforce development priorities in a cluster.

## Engage

The last stage of the Workforce Diagnostic is the **Engage** stage. Its objective is to secure stakeholders' commitments to implement the action plans that will further workforce development and build competitive advantage. In this stage, the Workforce Diagnostic attempts to answer the following questions:

- ***Who will be responsible for actions?***  
Government, labor, industry, workers; the specific person
- ***How will actions be institutionalized?***  
Policies, laws, committees; timeframe for implementation of commitments
- ***How will the stakeholders know when an action has been successfully implemented?***  
Performance measurement indicators, appropriate benchmarks
- ***How can external organizations support and monitor the process?***  
Donors, NGOs, PVOs as financial supporters, monitors, or in data collection and analysis

The Engage stage uses strategic retreats, consultative groups, and performance measurement to create an output of **specific action commitments**. These commitments can be both long-term and short-term. Long-term commitments will be implemented over a significant timeframe, while short-term commitments will vary based on the clusters studied in the Workforce Diagnostic. Short-term commitments might include RFPs, implementation reports, recommendations on governance structures, or financial commitments. The goal is to produce commitments and results that will start the Workforce Diagnostic over again in a changed, more competitive environment.

### III. Workforce Diagnostic Outputs

The Workforce Diagnostic is broken into four stages that each have discrete primary outputs (See **Figure 3.0**). However, the results of each stage vary in each country and industry cluster. Below is a list of potential outputs for each stage:

<b>STAGE</b>	<b>OUTPUT**</b>
Explore	Workforce Development Scope of Work integrated with USAID Strategy
Examine	Cluster Screening, Competitiveness & WD Research
Envision	Cluster Strategic Workshop Action Plans
Engage	Implemented Actions

\*\*The name and dynamic of the output varies depending on the USAID's Mission's priorities and the amount of cluster competitiveness already conducted.

#### Explore Stage

This stage is working primarily with the USAID Mission to bring competitiveness and workforce development activities into its strategy. As a result, the outputs for this stage are for USAID itself. These outputs might include:

- Mission strategy workshop and action plan
  - Assist in the design of workforce development strategic objectives or intermediate results
  - Design of SO or IR performance indicators relevant to workforce development initiatives
  - Design of competitiveness projects that incorporate workforce development
- Workforce Diagnostic and Strategic Planning Scope of Work and Budget

#### Examine Stage

In the Examine stage, the WDS Team focuses outward on looking at potential industries that could form clusters and would benefit from workforce development strategies. This is primarily a research and data collection stage. The outputs might include:

- Cluster Demarcation and Screening Matrices
- Visual Cluster Linkage Map
- Desk research documentation
- Interview Reports
- Focus Group Notes
- Recommendations on Intermediate Actions and Research Needs

#### Envision Stage

In the Envision Stage the WDS Team works with a wide group of stakeholders to develop concrete workforce development strategies that will assist in obtaining greater competitiveness. These outputs might include:

- Cluster Strategic Workshop Action Plan
- Supply Chain Component Workforce Examination
- Competency Assessment
- Cluster Human Resource System Valuation

## Engage Stage

The Engage Stage is the full implementation stage. The outputs will be directly determined by the stakeholders, however, below are potential outputs as demonstrated in other applications of the Workforce Diagnostic:

- Workforce Development Case Studies
- Demand Assessments and Communication Programs
- Career Pathing and Evaluation Program Development
- Job Forecasting
- Labor Compensation Survey
- Job Placement / Career Center Development
- Association Development and Restructuring
- Standardization Council and Boards
- Approved Training Provider Directories
- Joint Private Sector and Educator Curriculum Review Process Developed
- Endowed Professorships
- Revolving Door for Faculty to Gain Private Sector Experience

## IV. Team Roles and Responsibilities

In all four stages a core WDS team is needed to conduct the methodology. The core team normally includes a Project Manager, Team Leader, and at least one Research Associate. After the clusters are identified Cluster Specialists, and Human Resource Specialists can be added to the team.

In order to take full advantage of the time in the field with stakeholders and create niches of expertise, it is important to breakdown the core team in the following two manners:

- **Demand & Supply Teams:**

In conducting interviews and reviewing research, each member of the core team should be designated as focusing on the demand side (private sector, employers, associations, in-house training), or the supply side (educational institutions, training providers).

- **Cluster Teams**

In addition to assigning team members to demand or supply teams, each team member should also be responsible for undertaking this role in specific clusters. So for example, if the WDS Team is initially exploring six clusters in order to narrow this list to three, a Team leader might focus on the supply-side of three of these potential clusters.

The breakdown of the teams is obviously dependent on the team size and the overall level of effort available. The team breakdown is the decision of the WDS Team Project Manager.

The roles and responsibilities for the core team should be decided by the Project Manager and documented in detailed workplan. In general, the basic roles and responsibilities are listed below:

**Project Manager:**

- Manage client expectations
- Manage budget and LOE usage
- Oversee all demand and supply research in all cluster industries
- Lead either demand or supply team
- Lead one or more cluster team
- Lead interviewer, focus group facilitator, strategic workshop facilitator
- Review and contribute to writing for all deliverables

**Team Leader:**

- Assist in managing client relationship
- Lead either demand or supply team
- Lead one or more cluster teams
- Review and contribute to writing for all deliverables
- Lead interviewer
- Focus group facilitator
- Strategic workshop facilitator

**Research Associate:**

- Conduct pre-trip desk / Internet research and assemble briefing book
- Coordinate interview schedule
- Coordinate logistics for focus groups

- Coordinate logistics for strategic workshops
- Demand or supply team member
- Cluster team member
- Assist in conducting stakeholder interviews
- Assist in presentation preparation for focus groups and client presentations
- Author sections of deliverables

**Cluster Advisors:**

- Lead specific cluster research teams
- Conduct cluster specific interviews
- Assist in the facilitation of focus groups / strategic retreats
- Author presentations and deliverables associated with
- Manage relationship with cluster specific stakeholders
- Advise core team on implementation of “Action Vision”

*Figure 4.0* details the tasks that need to be completed before the first Mission trip and the core team member normally responsible:

<b>Figure 4.0 Pre-Trip Tasks</b>	
<b>Team Member</b>	<b>Task</b>
PM Draft; Team review	Detailed Mission Trip Workplan
Team Leader draft; PM review	USAID Kick-Off Meeting Presentation
Team Leader, PM review	Demand Side Interview Guide
Team Leader, PM review	Supply Side Interview Guide
Research Associate	Desk / Internet Research
Research Associate, Team review	Potential Interview Lists
Research Associate	Logistics (Transportation, lodging, , visas, etc.)
PM decision, Research Associate implement	Set up initial interviews

## V. Cluster Screens

In certain countries the USAID mission may ask the WDS Team to select two or three clusters from among several clusters in which to implement the Workforce Diagnostic. In this case, selected clusters should be those where workforce development initiatives can quickly be designed, implemented, and have the greatest impact. The WDS Team uses a rigorous cluster screening process to look at each cluster. The screens vary from country to country based on the importance of different factors in that country.

Please see Section 2 of Sri Lanka Deliverable I for an in-depth discussion of the screens used in that application as it was the most comprehensive screening conducted thus far by the WDS Team.

## VI. Research Collection Methods

The collection of accurate and relevant data is the core on which the Workforce Diagnostic is built. However, relevant data on such issues as the present workforce, unemployment rates, training, and human resource systems of a country, region, cluster, or company are often difficult to locate in some environments. As a result, the PWC WDS Team has developed several diverse methods for collecting, documenting, and valuing data used in the Diagnostic. *Figure 5.0* depicts these different methods.

**Figure 5.0 Workforce Diagnostic Data Collection Methods**

Source	Validity	Weighting	Example
Desk Research	<ul style="list-style-type: none"> <li>Current year</li> <li>Last 5 years</li> </ul>	0 2-5	5
Internet Research	<ul style="list-style-type: none"> <li>Updated in past month</li> <li>Updated in last year</li> </ul>	0 1	1
Survey (Baseline or Annual)	<ul style="list-style-type: none"> <li>Statistically significant sample</li> <li>NOT statistically significant sample</li> <li>Current year</li> <li>Last 5 years</li> </ul>	0 2 0 2-5	2 2
Interview: (Informational or Focused)	<ul style="list-style-type: none"> <li>Data point or opinion validated by group or documents</li> <li>Data point or opinion NOT validated by group or documents</li> </ul>	1 3	1
Focus Group	<ul style="list-style-type: none"> <li>Data point or opinion validated by group or documents</li> <li>Data point or opinion NOT validated by group or documents</li> </ul>	1 3	1
Strategic Workshop	<ul style="list-style-type: none"> <li>Data point or opinion validated by group or documents</li> <li>Data point or opinion NOT validated by group or documents</li> </ul>	1 3	3
<b>TOTAL</b>			<b>15</b>

The goal in this research process is data collection having the lowest weighting possible, thus representing well-documented, current data, validated by numerous sources. This allows the WDS Team confidence that it is building its competitiveness and workforce development arguments on

sound information. This is not to say that verbal information disseminated through interviews, focus groups, and workshops (i.e. higher weighting assignments) is not extremely valuable. In fact, through the WDS Team pilots we have been dependent on this information to demonstrate two key elements: 1) the cluster stakeholders know their industries best; and 2) there is a lack of concrete, documented information that would assist these stakeholders to increase their competitiveness. In the end, the weighting system is used (and will be ideally listed in research oriented deliverables) to inform the reader about the quality of data available to undertake this type of analysis.

The following section provides a very high-level overview of each of these collection methods, however, the actual sources of information are explored in *Section VII*.

**Figure 6.0 Using Data**

Trend data and comparative data are generally more useful for analytic purposes than standalone statistics because they tend to reduce ambiguities and provide a better context for data analysis. However, if standalone statistics are used, it should be within a framework that clearly answers the "so what?" question. For example, "Land A's widget sector employed 100,000 workers in 1999," conveys less information than a sentence which conveys trends: "Land A's widget sector employed 100,000 workers in 1999, a substantial increase from 90,000 workers in 1998, 85,000 workers in 1997, and 65,000 workers in 1994".

Additionally, data should be used strategically with a clear purpose, to illustrate a point or to argue a case rather than for the mere sake of using data. The analyst should also refrain from reaching broad conclusions based on limited data. Importantly, all data sources must be heavily footnoted and referenced.

## Background Research

The following are mechanism used to conduct background research:

- **Desk research:** The goal of this tool is to continue to gather published and unpublished documents at both the country and country specific level. The key to this tool is to begin to assemble an understanding of the larger competitiveness environment, and more specifically critical workforce issues and any initiatives or “sparks” signaling where the Diagnostic could have impact.
- **Internet research:** The Internet is a useful research tool to quickly get a sense of the high level economic and political information, “hot button issues,” relevant organizations, and potential stakeholders. The search should be originally be expansive looking not simply at workforce development issues, but understanding the larger economic, cultural, and policy environments. After gaining an understanding of this level, the search can be reduced to more specific cluster issues. Specifically, the Internet is a good tool for finding statistical economic, political, and social indicators that can be used to benchmark the current testing environment against previous time periods and other nations.

## Dialogue Tools

The following describes a variety of dialogue tools utilized in the Workforce Diagnostic.

- **Informational interviews:** Once preliminary stakeholders are identified, informational interviews can be conducted. The goal of this type of interview is not to have questions focused around specific issues, but rather to utilize interview guidelines that allow the stakeholder to share information, documents, and other resources about a range of topics. This tool works best when interviewing individuals on an initial stakeholder list.

### Figure 7.0 Interview Talking Points – Sri Lanka Example

If the researcher is conducting either an informational or focused interview, the following talking points should be used to describe this Workforce Development Strategies activity:

- As the development of workers directly contributes to overall competitiveness, USAID is sponsoring an activity that looks at how to better develop the workforce in order to create greater competitiveness in key industry clusters in Sri Lanka.
- The Workforce Development Strategies (WDS) Team undertaking this assignment is made up of consultants from PricewaterhouseCoopers’ Washington D.C. and Sri Lanka offices as well as consultants from J.E. Austin and Associates.
- As a member of the WDS Team, I am presently collecting preliminary data for this activity and you have been identified as a key stakeholder in this industry cluster.
- In early April and May, senior members of the WDS Team will be holding more in-depth interview and focus groups. We hope you can be a part of that process as well.
- Most importantly, although the information you share through this research process and through later interviews will inform the overall workforce development activity, the data you provide will be held as confidential and not shared with your name or your organization’s name attached.
- We look forward to working with you to develop workforce development strategies that will lead to greater competitiveness for you, your organization, and your cluster.

- **Focused interviews:** Although more general informational interviews may be sufficient in discussions with some preliminary stakeholders, more focused interviews will be necessary in gleaning specific topical information. In these interviews, the interviewer can focus in on the stakeholder’s role in certain issues pertinent to workforce development.

- **Focus groups:** are used to explore the attitudes or desires of groups of individuals. These are small groups of 8-10 individuals, led by a facilitator. Focus groups can be used to initiate and promote dialogue, validate or obtain specific information, probe a complex issue or explore issues difficult to quantify. This tool is most effective if conducted away from the place of work, and it is important that participants are informed that their management supports the process.
- **Strategic workshops:** are a valuable dialogue tool to allow participants to step out of their daily responsibilities in order to address specific issues and create a unified vision for cluster or sector development. Strategic workshops should allow for frank and open discourse concerning key issues chosen by relevant stakeholders. Key to the success of a strategic workshop is dynamic group participation. Breakout groups, case studies, and other participatory tools should be used to ensure the active involvement of participants. Retreats are most useful for their ability to raise pertinent issues and solicit honest, frank interchange. However, in order to sustain the results of the retreat, conclusions should be codified in an output. This can summarize lessons learned, identify commitments made, and lay out a future agenda for action.

## Survey Instruments

The following describes two types of survey techniques that could be used to gather research or data:

- **Baseline survey:** A baseline survey is a data collection instrument that can be used to collect needed information in numerous diverse categories. In the case of the Workforce Diagnostic, it can be used to understanding the larger cluster competitiveness, workforce implications, and articulation of demanded skills and future labor changes required in order for the sector to gain competitiveness. This type of extensive survey could then be used in future years to base performance and progress.
- **Annual planning survey:** While the baseline survey is a critical tool, developing and administering it is complex and expensive. It is unlikely that all cluster stakeholders will have the time or budget to pursue it. Yet, annual survey data should still be gathered. An annual planning survey could provide data on specific areas of immediate concern.

*Appendix A* outlines some additional tools that the WDS Team may use in their analysis and implementation of the Workforce Diagnostic.

## VII. Sources of Information

In addition, to understanding the collection methods and validity of the data, understanding the best places to actually find the needed information is also key to the Workforce Diagnostic. In *Figure 8.0* is a list of major sources that the WDS Team has found helpful in the past.

The Workforce Diagnostic is cluster based. As a result, a majority of the research (regardless of the method or source) will be focused around an industry. As previously indicated, the needed data can easily be broken into two primary areas: 1) demand and 2) supply. The demand data will primarily be collected from private sector business leaders and industry associations. In some countries there may already be significant competitiveness data on the demand side that tells the story about what the industry looks like worldwide and what changes it will need to make in order to be competitive in the future. The WDS Team's role is to isolate the workforce issues within this story and bring these to the forefront. The supply side research will most probably be collected from educators and training providers.

In the sections ahead, this methodology guide lists the data points and questions that the WDS Team needs to identify in order to make a compelling workforce development argument. Next to each question/data point, the guide lists the most probable data collection method (see Section I.) and the most probable source of the data (See Section II.) These are simply guidelines for conducting the research and should not limit the researcher's innovation in attempting to gather the needed data.

**Figure 8.0 Sources of Information**

- Government
  - Ministry of Statistics
  - Ministry of Labor
  - Ministry of Education
  - Ministry of Finance
  - Central Bank
- Private Sector Company Documents
  - Annual reports
  - Training manuals
  - Personnel manuals
  - Benefits handbooks
- Associations Documents
  - Membership lists
  - Membership survey
  - Annual meeting reports / presentations
  - Examples: Chambers of Commerce, Rotary clubs, Business executive clubs
- Think Tanks
  - Membership lists
  - Surveys
  - Research reports
  - Annual meeting / reports / presentations
- Universities
  - List of board members
  - Course offerings
  - Teach methodologies
  - Faculty training manuals
  - Major curriculum requirements
  - Teaching materials (syllabus, case studies, tests)
  - Internship documents
- Media
  - Newspaper articles
  - Radio / TV broadcast tapes
  - Press releases
  - Job want ads
- Public Documents
  - Telephone books
- International Organizations
  - USAID strategy and project reports
  - Bi-lateral donors program offerings
  - United Nations
  - World Bank

## V. Cluster Research: Demand Side

DATA POINTS	SUGGESTED COLLECTION METHOD	SUGGESTED SOURCE
<b>STAKEHOLDERS</b>		
<i>Who are the major players in the cluster?</i> Provide names of companies, chairperson, human resource directors (if available)	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Internet Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Telephone book</li> <li>• Company websites</li> <li>• Association member lists</li> </ul>
<b>CLUSTER DEMARCATION &amp; MAPPING</b>		
<i>How many companies are in the cluster?</i> -Include companies throughout the entire cluster supply chain (i.e. suppliers, producers, distributors, associations, etc.) -Provide a breakdown of # of companies in each sector of the cluster	<ul style="list-style-type: none"> <li>• Interviews</li> <li>• Desk Research</li> </ul>	<ul style="list-style-type: none"> <li>• Associations documents</li> <li>• Telephone books</li> </ul>
What are the primary products and services of the cluster?	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Internet Research</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Statistics</li> <li>• Company documents</li> </ul>
What percentage of GDP does the cluster represent?	<ul style="list-style-type: none"> <li>• Desk Research</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Statistics</li> </ul>
What were annual cluster sales in the past five years?	<ul style="list-style-type: none"> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Statistics</li> <li>• Associations</li> <li>• Think Tanks</li> </ul>
What were the annual revenues in the past five years?	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Internet Research</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Statistics</li> <li>• Company documents</li> </ul>
What is the local demand for the product (i.e. who are Sri Lankan users)?	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Informal Surveys</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Import/Export info</li> <li>• Company documents</li> </ul>
Does the cluster export its primary product(s)? What percentage?	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Import/Export info</li> <li>• Company documents</li> </ul>
What is the expected growth of the cluster? -Production growth? -Sales growth? -Export growth?	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Company documents</li> <li>• Cluster reports</li> <li>• Association estimates</li> </ul>
<b>COMPETITION</b>		
What are trends either in Sri Lanka or outside that are affecting the cluster? -Examples might include: new trade policies, policies, legislation, industry retrenchment, labor laws, wars	<ul style="list-style-type: none"> <li>• Internet Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Government websites</li> <li>• Media: newspaper articles</li> </ul>
What are the most important drivers for growth?	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Company documents</li> <li>• Think Tanks/ Universities</li> <li>• Associations</li> </ul>
What are the most important obstacles to growth?	<ul style="list-style-type: none"> <li>• Interviews</li> <li>• Surveys</li> </ul>	<ul style="list-style-type: none"> <li>• Company documents</li> <li>• Associations</li> </ul>
<b>EMPLOYMENT IMPACT</b>		
How many workers does the cluster employ? Direct jobs? Indirect jobs? Please provide a breakdown by segment of the cluster.	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Labor</li> <li>• Ministry of Statistics</li> <li>• Company Documents</li> <li>• Extrapolation</li> </ul>
Has the number of employees been growing or contracting?	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Labor</li> <li>• Ministry of Statistics</li> <li>• Company Documents</li> </ul>



	<ul style="list-style-type: none"> <li>• Focus Groups</li> </ul>	
Do members participate in curriculum development?	<ul style="list-style-type: none"> <li>• Interviews</li> <li>• Surveys</li> <li>• Focus Groups</li> </ul>	<ul style="list-style-type: none"> <li>• Company managers / HR directors</li> <li>• Universities</li> </ul>
Are there industry-wide meetings or conferences? Are educators or training providers invited?	<ul style="list-style-type: none"> <li>• Interviews</li> <li>• Surveys</li> <li>• Focus Groups</li> </ul>	<ul style="list-style-type: none"> <li>• Company managers / HR directors</li> <li>• Universities</li> </ul>

## VI. Cluster Research: Supply Side

The following charts listed the major research questions and the most likely collection method and source that the consultant will use to find this data.

DATA POINTS	SUGGESTED COLLECTION METHOD	SUGGESTED SOURCE
<b>STAKEHOLDERS</b>		
Who are the major educators of skills in this cluster? -Provide names of universities / technical schools / vocational schools that have departments, schools, or simple classes in the cluster areas. -Provide names of dean or professors and contact information. -Could be general areas such as schools of agriculture, education, hospitality	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Internet Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Telephone book</li> <li>• University listings</li> <li>• Association directories</li> </ul>
Who are the major training providers in the cluster? -Name any training providers that offer courses on cluster topics. -Provide names and contact information.	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Internet Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Telephone books</li> <li>• University listings</li> <li>• Association directories</li> </ul>
<b>GRADUATES</b>		
Of the major education institutions and training providers that work in the cluster, how many students graduate in these fields per year?	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Statistics</li> <li>• University documents</li> </ul>
<b>CURRICULUM</b>		
What is a typical curriculum at an example institution? -Provide an example list of required classes	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Interviews</li> <li>• Focus Groups</li> </ul>	<ul style="list-style-type: none"> <li>• University documents</li> </ul>
What is the length of the program?	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• University documents</li> </ul>
Do any of the educators or training providers offer short courses or executive programs? -If so, name the institution and provide an example list of required classes.	<ul style="list-style-type: none"> <li>• Desk Research</li> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• University documents</li> <li>• Training providers</li> </ul>
How is the curriculum developed?	<ul style="list-style-type: none"> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Educators / Training Providers</li> </ul>
How often is it updated?	<ul style="list-style-type: none"> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Educators / Training Providers</li> </ul>
What approvals does an institution need to revise a full curriculum? A single course?	<ul style="list-style-type: none"> <li>• Interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Educators / Training Providers</li> </ul>
<b>TEACHING METHODS</b>		
What type of teaching methods do educators and training providers use to teach relevant cluster courses? -Examples may include: lectures, hands-on learning, field experiments, case studies, guest private sector lectures, team projects, internships, work study programs, mentorships.	<ul style="list-style-type: none"> <li>• Interviews</li> <li>• Focus Groups</li> </ul>	<ul style="list-style-type: none"> <li>• Educators / Training Providers</li> <li>• Students</li> </ul>
Do the professors, teachers, or trainers have relevant professional experience?	<ul style="list-style-type: none"> <li>• Interviews</li> <li>• Focus Groups</li> </ul>	<ul style="list-style-type: none"> <li>• Educators / Training Providers</li> <li>• Students</li> </ul>
<b>LINKAGES WITH THE PRIVATE SECTOR</b>		

Does the learning institution have any direct relationship with private sector firms in the industry cluster? If so what are they?	• Interviews	• Educators / Training Providers
Are private sector leaders involved in the development or update of curriculum?	• Interviews	• Educators / Training Providers
How do the learning institutions place their graduates in jobs? -Does the institution have career networking events with the private sector? Alumni programs? -Jobs board?	• Interviews	• Educators / Training Providers
Do members of the learning institutions sit on any industry boards or are members of industry associations?	• Interviews	• Educators / Training Providers

*Appendix B* contains a template for documenting sources collected through desk research.  
*Appendix C* contains templates for demand-side and supply-side interview guides.

## Appendix A: Additional Workforce Diagnostic Tools

**Best-practice Benchmarking:** Comparing workforce development strategies in the current environment to other environments is helpful to understand the strengths and weaknesses of the current progress and adopt strategies that have been successful in other environments. This tool creates benchmarks using the best practices from other environments to help set goals and strategies in the present environment. Depending on the momentum that is driving the evolving spiral, comparisons could come from other countries, regions, and industries with similar workforce development issues.

**Supply Chain Analysis:** can be used to understand the supply side of the environment. In other words, how people in the current environment develop and utilize skills and training to meet the employment demand. This workforce development value chain has four parts that correspond to a traditional value chain: employment pool (raw material), training providers (added value), employers (intermediate product), and the final customer (end product / service). Depending on the focus of the Methodology application, the analysis can look at the linkages between all of these parts or focus in on how one or two of these elements relate.

This tool allows stakeholders to develop a common understanding about the role of training providers in the sector; their relationship to the student and unemployment pool; and their relationship with industry. A value chain analysis is helpful to answer important questions like: Are training providers upgrading their strategies, methodologies, technologies, teaching materials, and training skills to meet the needs of the industry as industry evolves?

**Stakeholder Mapping:** is used to identify, quantify and segment the various actors in the workforce value chain. It is a useful basis from which to develop estimates and project priorities. Processes to be employed during stakeholder mapping could include:

- Quantifying the labor pool from which the industry sector draws its people, including the unemployed, the new entrants, and the job-changers
- Identifying key providers of relevant training
- Identifying the types of jobs in the industry by category and type of enterprise, and developing tentative estimates about the number of new jobs and the projections for future job creation
- Identifying the key actors in government at the national, regional and local levels, as well as leading social enterprises that are contributing to skills development and innovation.

The process of stakeholder mapping provides the basis for the subsequent linkage analysis.

**Linkage Analysis:** is used to understand how stakeholders are linked in order to achieve common goals, such as skills development. It can analyze the linkage mechanisms that connect the education and training providers with the industry being analyzed and link backwards to the prospective student-employees. Examples of such linking mechanisms include placement programs, internships, apprenticeships, advisory committees, short courses for private companies and individuals, executive education and corporate sponsorship programs. This stage also involves an assessment of the pedagogy, technology and teaching methods and the extent to which these are responding to the rapidly changing environment.

A linkage analysis should be undertaken at two levels: macro and micro. A macro level analysis maps the broad types of institutional relationships (formal and informal) that exist and shape sector

policy choices and implementation. Micro level analyses linkages pertain to the actual practices at the firm level (employer or provider) that have or can establish effective bonds between students, trainers and industry.

In addition, linkage analysis should identify, define, and describe both formal and informal linkages. Formal linkages represent formal relationships between people, groups or institutions. They are created by laws, formal agreements, mandates or regulations. Informal linkages represent relations between stakeholders that are built on the basis of friendship, respect, trust, common goals, etc.

Interviews, focus and discussion groups, policy papers, retreats and surveys are useful ways to begin determining linkage analyses. However, in order to identify informal linkages, these may not prove sufficient and a degree of personal judgement will need to be employed. The results of a linkage analysis should be displayed on a linkage map.

**Performance Measurement:** provides answers to some of the following questions: How successful have programs been to date? By what indicators? Have goals set been achieved? What benchmark was used to measure success, and has this proved a suitable measurement? If no, what mechanisms are in place to refine the process?

Progress in meeting goals should be analyzed on three levels: inputs, outputs, and outcomes.

- **Inputs:** Inputs refer to the activities and materials that an organization utilizes to carry out its mission. An example of an input is a membership charge that an organization charges from its members.
- **Outputs:** Outputs refer to the material and actions that were taken based on the input. Examples of outputs include grants, educational courses, industry forums and publications. Measuring outputs provides quantitative information on an organization's activity, an overview of what has been accomplished over a certain time period, and can be used as an indicator of how well goals have been met.
- **Outcomes:** Inputs and outputs assist in taking a snapshot of an organization's performance. In order to understand its long-term impact, however, an organization must measure outcomes of its activities, or, in other words, what is the added value to the industry and the community? It is difficult to measure outcomes. The results of a successful initiative may not be felt for several years. Similarly, a difficult decision seeking long-term benefit may prove challenging in the short-term. However, seeking to understand outcomes is an important part of performance measurement and should be a crucial part of the review process.

## Appendix B: Demand &amp; Supply Side - Format for Sourcing Desk Research

## Cluster A - Demand Side Research

DATA POINTS	DATAPPOINT AND SOURCE
<b>STAKEHOLDERS</b>	
<i>Who are the major players in the cluster?</i> Provide names of companies, chairperson, human resource directors (if available)	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
<b>CLUSTER DEMARCATION &amp; MAPPING</b>	
<i>How many companies are in the cluster?</i> -Include companies throughout the entire cluster supply chain (i.e. suppliers, producers, distributors, associations, etc.) -Provide a breakdown of # of companies in each sector of the cluster	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
What are the primary products and services of the cluster?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
What percentage of GDP does the cluster represent?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
What were annual cluster sales in the past five years?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
What were the annual revenues in the past five years?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
What is the local demand for the product (i.e. who are Sri Lankan users)?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
Does the cluster export its primary product(s)? What percentage?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
What is the expected growth of the cluster? -Production growth? -Sales growth? -Export growth?	<b>a) Production Data:</b>
	<b>a) Source:</b>
	<b>a) Comments:</b>
	<b>b) Sales Data:</b>
	<b>b) Source:</b>
	<b>b) Comments:</b>
	<b>c) Export Data:</b>
	<b>c) Source:</b>
	<b>c) Comments:</b>
<b>COMPETITION</b>	

What are trends either in Sri Lanka or outside that are affecting the cluster? -Examples might include: new trade policies, policies, legislation, industry retrenchment, labor laws, wars	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
What are the most important drivers for growth?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
What are the most important obstacles to growth?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
<b>EMPLOYMENT IMPACT</b>	
How many workers does the cluster employ? Direct jobs? Indirect jobs? Please provide a breakdown by segment of the cluster.	a) <b>Data for Direct Jobs:</b> )
	a) <b>Source:</b>
	a) <b>Comments:</b>
	b) <b>Data for Indirect Jobs:</b>
	b) <b>Source:</b>
	b) <b>Comments:</b>
Has the number of employees been growing or contracting? By how much?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
Based on the expected growth (or contraction) of the cluster, how many new jobs will be created (reduced) in the next year? Five years?	<b>Data:</b> Expected Growth Next Year:
	Expected Growth Five Years:
	<b>Source:</b>
<b>Comments:</b>	
<b>SKILLS DEMANDED</b>	
What are the functional or technical skills employers are requiring of employees in this cluster? -If possible, break skill sets into different job categories (managerial, supervisory, production).	<i>Functional / Technical Skills</i>
	a) <b>Data for Managers:</b>
	a) <b>Source:</b>
	a) <b>Comments:</b>
	b) <b>Data for Supervisors:</b>
	b) <b>Source:</b>
	b) <b>Comments:</b>
	c) <b>Data for Production/Technical Positions:</b>
	c) <b>Source:</b>
	c) <b>Comments:</b>
What are the core competency skills employers are requiring of employees in this cluster? -If possible, break skill sets into different job categories (managerial, supervisory, production).	<i>Core Competency Skills:</i>
	a) <b>Data for Managers:</b>
	a) <b>Source:</b>
	a) <b>Comments:</b>
	b) <b>Data for Supervisors:</b>
	b) <b>Source:</b>
	b) <b>Comments:</b>
	c) <b>Data for Production/Technical Positions:</b>
	c) <b>Source:</b>
	c) <b>Comments:</b>
Are firms able to find employees with this needed skill set?	<b>Data:</b>
	<b>Source:</b>

	<b>Comments:</b>
<b>HUMAN RESOURCE SYSTEMS</b>	
How do firms in the cluster recruit? Examples: Newspaper, word of mouth, postings, universities, and technical schools?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
What is the average salary paid to 1) managers; 2) supervisors; 3) production staff or technical staff? Is this competitive?	<b>a) Data for Managers:</b>
	<b>a) Source:</b>
	<b>a) Comments:</b>
	<b>b) Data for Supervisors:</b>
	<b>b) Source:</b>
	<b>b) Comments:</b>
	<b>c) Data for Production/Technical staff:</b>
	<b>c) Source:</b>
	<b>c) Comments:</b>
What policies do cluster firms have to retain employees? -Provide examples and source.	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
<b>TRAINING</b>	
In general, do firms within the cluster provide new workers training?	Yes
	No
	Provide examples:
	<b>Source:</b>
	<b>Comments:</b>
Is the new worker training: 1) on the job; 2) conducted in house; 3) outsourced to private training providers?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
Do firms within the cluster provide current workers on-going training?	Yes
	No
	<b>Source:</b>
	<b>Comments:</b>
Is the worker training: 1) on the job, 2) conducted in house, 3) outsourced to private training providers?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
On average, what percentage do of their gross wage bill do private firms spend on training? -Greater than 15% -Between 10 - 15%? -Between 5 – 10%? -Less than 5% -Less than 1%	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
<b>LINKAGES WITH EDUCATORS</b>	
Do private sector members of the industry cluster have active relationships and contacts with education institutions and/or training providers? If yes, provide examples	<b>Data:</b>
	<b>Source:</b>

	<b>Comments:</b>
Are there members of education institutions and/or training providers on companies’ boards of directors? Provide examples.	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
Do members participate in curriculum development? Provide examples.	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
Are there industry-wide meetings or conferences? Are educators or training providers invited? Provide examples.	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>

**Cluster A - Supply Side Research**

DATA POINTS	
<b>STAKEHOLDERS</b>	
Who are the major educators of skills in this cluster? -Provide names of universities / technical schools / vocational schools that have departments, schools, or simple classes in the cluster areas. -Provide names of dean or professors and contact information. -Could be general areas such as schools of agriculture, education, hospitality	<b>Name/contact information:</b>
	<b>Source:</b>
	<b>Comments:</b>
Who are the major training providers in the cluster? -Name any training providers that offer courses on cluster topics. -Provide names and contact information.	<b>Name/contact information:</b>
	<b>Source:</b>
	<b>Comments:</b>
<b>GRADUATES</b>	
Of the major education institutions and training providers that work in the cluster, how many students graduate in these fields per year?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
<b>CURRICULUM</b>	
What is a typical curriculum at an example institution? -Provide an example list of required classes	<b>Data and Examples:</b>
	<b>Source:</b>
	<b>Comments:</b>
What is the length of the program?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
Do any of the educators or training providers offer short courses or executive programs? -If so, name the institution and provide an example list of required classes.	Yes
	No
	Provide examples:
	<b>Source:</b>
	<b>Comments:</b>
How is the curriculum developed?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>

How often is it updated?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
What approvals does an institution need to revise a full curriculum? A single course?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
<b>TEACHING METHODS</b>	
What type of teaching methods do educators and training providers use to teach relevant cluster courses? -Examples may include: lectures, hands-on learning, field experiments, case studies, guest private sector lectures, team projects, internships, work study programs, mentorships.	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
Do the professors, teachers, or trainers have relevant professional experience?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
<b>LINKAGES WITH THE PRIVATE SECTOR</b>	
Does the learning institution have any direct relationship with private sector firms in the industry cluster? If so what are they?	<b>Data and examples:</b>
	<b>Source:</b>
	<b>Comments:</b>
Are private sector leaders involved in the development or update of curriculum? If so, provide examples.	<b>Data and examples:</b>
	<b>Source:</b>
	<b>Comments:</b>
How do the learning institutions place their graduates in jobs? -What percentage by graduation?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
-Does the institution have career networking events with the private sector? Alumni programs? -Jobs board?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>
Do members of the learning institutions sit on any industry boards or are members of industry associations?	<b>Data:</b>
	<b>Source:</b>
	<b>Comments:</b>

## Appendix C: Demand &amp; Supply Side Interview Guides

**WORKFORCE DEVELOPMENT STRATEGIES  
DEMAND SIDE INTERVIEW GUIDE**

**Date:**  
**Cluster:**  
**Company/Organization:**  
**Address:**  
**E-mail:**  
**Interviewee(s):**  
**Title:**  
**PwC Interviewer(s):**

*Introduction to Project (4 Minutes)*  
*Confidentiality of information shared (1Minute)*  
*Questions (35 minutes)*

**Company Background**

1. What are your company's products and services?

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2. What were your annual sales this year?

Rs \_\_\_\_\_ US\$ \_\_\_\_\_

3. What is the anticipated average sales growth 2000 – 2005?

Range	Check appropriate box
0 – 5% growth	
5 – 10% growth	
10 – 20% growth	
Greater than 20% growth	
Decline	

4. Does your organization have operations throughout Sri Lanka? What are the regional or international locations?

---



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**Competition**

5. Intensity of Competition: How many companies are there in the industry that produce your same product / service (i.e. # of competitors, concentration)? Domestically and internationally?

\_\_\_\_\_

\_\_\_\_\_

6. What is the nature of the competition (i.e. price, brand, quality, advertising, location, etc.)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

7. How would you like to differentiate your company's products and services from those of your competitors?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8. What other companies are in your supply chain (i.e. suppliers, producers, distributors, associations.)

Suppliers	Producers	Distributors	Associations	Other

9. What was the industry's total sales last year?

Rs \_\_\_\_\_ US\$ \_\_\_\_\_

10. What is the expected revenue growth this year?

Range	Check appropriate box
0 – 5% growth	
5 – 10% growth	
10 – 20% growth	
Greater than 20% growth	
Decline	

11. What are the most important drivers for growth? (For the company and the industry).

Company: \_\_\_\_\_

Industry: \_\_\_\_\_

12. What are the most important obstacles to growth? (For the company and the industry).

Company: \_\_\_\_\_

Industry: \_\_\_\_\_

**Product Demand**

13. What is the local Sri Lankan demand for your product / service? (Domestic sales as a % of total sales?)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. What is the foreign demand for your product / service? How much is exported?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

15. Who are your primary customers? Do you have access to adequate market research?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Workforce Development Issues**

16. How many total employees are there in the company?

\_\_\_\_\_

17. Does your company have any subcontractors? Any informal sector contractors? If so, how many?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

18. Can you provide an estimate of the total number of (direct and indirect) employees in the sector?

\_\_\_\_\_

19. What percentage of your employees are at the following different levels?

Level	Men	Women
Managerial		
Supervisory		
Technical		
Support Staff		
Subcontractors and informal sector workers		

13. What are the most critical skills employees need coming into the industry at the different levels?

Level	Skills Needed
Managerial	
Supervisory	
Technical	
Support Staff	
Subcontractors & informal sector workers	

14. Are you able to hire sufficient skilled staff to meet your present needs?

Level	Yes / No	Reason
Managerial	Yes No	
Supervisory	Yes No	
Technical	Yes No	
Support Staff	Yes No	
Subcontractors & informal sector workers	Yes No	

15. What % change in number of employees at different levels do you anticipate 2000 – 2005 (annually):

Level	Men	Women

Managerial		
Supervisory		
Technical		
Support Staff		
Subcontractors & informal sector workers		

16. Are your wages competitive with your competition?

\_\_\_\_\_

\_\_\_\_\_

17. What policies does your company have to retain employees?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

18. Are there any particular reasons women are in the positions they are?

\_\_\_\_\_

\_\_\_\_\_

19. How does your organization find and hire employees?

- Newspaper job postings
- Help wanted signs
- University/training center recruitment
- Word-of-mouth
- Other

Comment on your hiring/recruitment practices: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Supply-Side: Training

20. Is the formal educational system meeting the needs of industry?

Yes      No      Why or why not? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

21. What percentage of your total wage bill was spent on training in the last financial year?

Level	% of Total wage bill spent on training
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Greater than 15%	
Between 10 - 15%	
Between 5 – 10%?	
Less than 5%	
Less than 1%	

22. Do you provide formal training for new workers? If so is it “on-the-job,” in-house, or outsourced by private training providers?

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23. Do you provide formal training for existing workers? If so is it “on-the-job,” in-house, or outsourced by private training providers?

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24. Are there any training institutions that provide specific training in your sector?

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25. Do you use external training providers, including universities, research centers, technical schools, etc. Why or why not?

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26. Which training providers do you prefer? Why?

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27. How would you rate the quality of the providers?

<b>Good</b>	
<b>Average</b>	
<b>Poor</b>	

28. How do you rate your company's training activities relative to those of your local and international competitors?

	Local Competitors	International Competitors
Good		
Average		
Poor		

29. What type of training institutions/activities would you like to see created?

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**Stakeholder Linkages**

(Stakeholders = Private sector, Government, associations, training providers, all segments of cluster)

30. Does your business or others in your industry have active relationships and contacts with education institutions and/or training providers?

Yes      No      Describe \_\_\_\_\_

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31. If you do not have relationships with training providers, is it something your company would like to develop?

Yes      No      Why or why not?

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32. Do you have active relationships and work with other members of your industry?

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33. Is there communication between the industry and the government? What government actors should be involved?

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Appendix C Continuedd

WORKFORCE DEVELOPMENT STRATEGIES  
SUPPLY SIDE INTERVIEW GUIDE

**Date:**  
**Cluster:**  
**Company/Organization:**  
**Address:**  
**E-Mail:**  
**Interviewee(s):**  
**Title:**  
**PwC Interviewer(s):**

- *Introduction to Project (4 Minutes)*
- *Confidentiality of information shared (1Minute)*
- *Questions (35 minutes)*

**Organization Information**

1. Year Founded? \_\_\_\_\_

2. Number of students, faculty full and part-time

	Total No.
Students, full-time	
Students, part-time	
Faculty, full-time	
Faculty, part-time	

3. List diploma Programs:

Diploma Program	# of participants	# of trainers

4. List certificate and non-certificate programs, short courses, and executive programs:

Programs, Short Courses, Executive Education	# of participants	# of trainers	# of graduates

5. Who pays for training costs and what percent?

	% of Total Costs
Student/employee	
Company/employer	
Government assistance	
Scholarships or financial aid	

6. What are the institution's technical areas of specialization?

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**Stakeholders**

7. Who are the major educators of skills in this cluster that offer the same type of curriculum?

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8. Who are the major training providers in the cluster?

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9. Of the major education institutions and training providers that work in the cluster, how many students graduate in the field per year?

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**Curriculum**

10. What is a typical curriculum at an example institution?

Core Course Requirements	Elective Courses	Language of training	Length of Training/ Duration (months)	Related Internships or Work Programs?
Program 1:				
Program 2:				
Program 3:				
Program 4:				

11. How is the curriculum developed?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

12. How often is it updated? When was it last updated (year)?

\_\_\_\_\_

\_\_\_\_\_

Year \_\_\_\_\_

13. Do they use practitioners from the industry to review curriculum? If so, who?

Yes                  No                  Who? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

14. What approvals does an institution need to revise a full curriculum? A single course?

Full curriculum: \_\_\_\_\_

\_\_\_\_\_

Single course: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

15. How do the institution evaluate course performance, satisfaction and impact?

\_\_\_\_\_

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16. How have they added or upgraded offerings as a response?

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### Teaching Methods

17. What type of teaching methods do educators and training providers use to teach relevant cluster courses?

Method	% of curricula
Lectures	
Hands-on learning/field experiments	
Case studies, simulations, interactive methods	
Guest private sector lecture	
Computers, multimedia, other technologies	
Team projects	
Internships/work study programs	
Mentorships	
Other	

18. Do the professors, teachers, or trainers have relevant professional and education experience?

Level of Trainers' Education	% Trainers
Through 0/Level	
A/Level	
2 Years of University or equivalent diploma/degree	
B.S./B.A.	
Ph.D.	
Apprenticeship	

Trainers' Professional Training and Relevant Fulltime Work Experience (no of years)	% Trainers
0 to 1 years	
1 to 2 years	
2 to 5 years	
5 to 10 years	
More than 10 years	

19. Does the learning institution have any direct relationship with private sector firms in the industry cluster? If so what are they?

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**Instructors and Trainers**

20. Are instructors full time or part time?

Program	Number of Full-Time Instructors	Number of Part-Time Instructors
Program 1:		
Program 2:		
Program 3:		
Program 4:		

21. Do you use university teachers?    Yes            No

22. How do you train your teachers and trainers?

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23. How can this be strengthened?

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24. How do they stay current with training?

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**Private Sector Demand and Linkages to that Demand**

25. Which areas have the greatest demand for training in your sector/cluster?

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

26. What cluster/sector areas are the fastest growing?

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

27. What determines whether a company does the training in-house or outsources?

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

28. Do you have placement programs or counseling? (Describe)

Yes      No

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

29. Do you have any of the following to involve the private sector? If so, which private sector enterprises do you have affiliations with?

Programs Involving Private Sector	Affiliated Private Sector Partners
Alumni program Yes      No	
Internships/work study programs Yes      No	
Curriculum review Yes      No	
Use of industry experts as trainers Yes      No	
Fieldtrips & Office site visits Yes      No	
Consulting team projects Yes      No	
Mentorships Yes      No	

30. How do they market?

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

31. Provide technical or management consulting or just training?

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32. Are these linkages with the private sector event based or long-term retainer/relationship based?

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**Finances**

33. How does the institution finance its activities?

Type of Funding	% of Total Funding
Government funding	
Government R&D contracts	
Student fees and tuition	
Endowment	
Individuals	
Sri Lankan private companies	
Multinational companies	
Other (describe)	

34. How are fee structures determined (indicative per/day or per/week or per/course)?

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**Training Industry**

35. Who are some of the better training providers in your field? And the reason for their expertise?

Provider	Reason/Expertise
<hr/>	<hr/>

36. What can be done to strengthen training?

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37. Would you be interested in promoting contacts with international training providers?

Yes      No      If yes, anyone specific? 

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38. What training is proving to be most useful?

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39. What are the problems with traditional training providers?

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40. Is the formal educational system meeting the needs of industry?

Yes      No      Why or why not? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

41. If so, how to strengthen? If not, what are its weaknesses?

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42. How do you deal with English-Sinhala/Tamil problem and issues in cultural transformation?

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43. How do trainers keep up with management and technical concepts, changes, and innovation?

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44. Are there continuing education requirements for trainers?

Yes      No      If yes, describe \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Perceptions of Industry Served**

45. Does industry value and invest in training?

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46. What are the key technical and managerial challenges in the industry you serve?

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47. What are the principle reasons that students/companies train with you?



## Appendix D: Deliverable Style Guide

### Workforce Diagnostic: (All Countries)

- Except for the first reference, the U.S. Agency for International Development should be abbreviated as USAID.
- Except for the first reference, abbreviate PricewaterhouseCoopers as PwC.
- In all written and verbal communication the PwC Team should be referred to as the Workforce Development Strategies (WDS) Team. Except for the first reference, this should be abbreviated as the WDS Team.
- When stating a personal opinion, please refer to yourself in the third person (*Correct*: Mr. Smith believes that this will have no material impact on results. *Incorrect*: I think he's wrong).

### Workforce Diagnostic (Sri Lanka Specific)

- Figures should appear in Sri Lankan rupees (Rs23,334,789 for example). If applicable, the U.S. dollar equivalent should follow in parentheses.
- Sri Lankan proper names usually appear as the first initial (without a period) and the last name, as in M R Prelis).

### General Document Formatting

- Please use Times New Roman, pt. 11
- All text boxes should be written in Times New Roman, pt. 10
- All text should be written in Body Text until final edits are made
- Footnote all references (including interviews) in the standard format; footnotes should be Times New Roman, pt. 8. All references should also be included in a bibliography at the end of your section of the report (for inclusion in the master bibliography).
- Indent bullets and lists 1/4" from margin.
- Indent text 1/4" from bullet or number.

### General Grammatical Style Rules

- Write out the numbers one through ten. Use numbers for 11 and higher.
- Avoid use of the word "like." Substitute "such as" or similar.
- Spell out the names of countries rather than use abbreviations. *Correct*: United Kingdom
- Minimize use of passive voice. Substitute active tense.
- Use parallel construction to make a strong point and ensure a smooth flow.
- Do not use indents to indicate the beginning of a new paragraph. Instead, use a blank line between paragraphs to indicate paragraph breaks.
- Omit unnecessary words.

### General Punctuation Style

- In lists, use a comma before the "and." *Correct*: "red, white, and blue." *Incorrect*: "red, white and blue."
- When at end of sentence, footnote should be to right of period. *Correct*: end of sentence.<sup>1</sup> *Incorrect*: end of sentence<sup>2</sup>. Same rule applies to commas. Same rule applies to quotation marks; the period or comma should fall inside the quotation marks, not outside.
- Use only one space, not two, following punctuation marks such as a period at the end of a sentence and a colon.
- Do not use an apostrophe when referring to years of a decade, i.e., "1980s" not 1980's"
- Use an "em dash" (---) instead of a double dash (- -).

**Other**

Please spell check documents prior to submission.