



Welcome to the Workshop Launch of the Skills Gap Assessment in Province 5

t in



Hotel Club Denovo May 9, 2019







In Collaboration with













Skills for Employment Programme (सीप)

Overview

Prepared for

Workshop to Launch the Skills Gap Assessment in Province #5

May 9, 2019













In Collaboration with













सीप Overview | Project Scope

- Project with over four years duration; total value of £17 million
- Alignment with Federal (MoLESS/PMEP) and Provincial Skilling and Migration Related Priorities
- Nationwide with focus on key transformational sectors Agribusiness;
 Tourism; Hydropower Construction; ICT and Light Manufacturing;
- Priority Provinces 2 and 5
- £9.14M for Challenge Fund, of which £7M for Skills; £2.14 M for migration; Co-investment approach to respond to market failures

Goal: Better train and place Nepalis in both domestic and international jobs
Resulting in at least 90,000 Nepalis with an increase in income of at least 20%
attributed to the project.
40% will be women
30% from Disadvantaged Groups (DAGs) including PwDs





Why is Economic Transformation important for Skill Development?

Low Value Added Per Worker for Manufacturing

Country	Value Added per Worker (GBP per annum) 2011/12			
India	3,123			
Bangladesh	1,963			
Kenya	2,363			
Vietnam	2,436			
Mozambique	3,722			
Global Average	17,200			
Nepal	1,380			

Source: World Bank, 2011/12



1.7%

Growth in labour productivity (2011-2017)

Low Skill Trap

Low Demand for Skilled Workers





Transformation of Nepal

What has Nepal achieved?

GDP per capita growth rate (CAGR, 2005-2017)











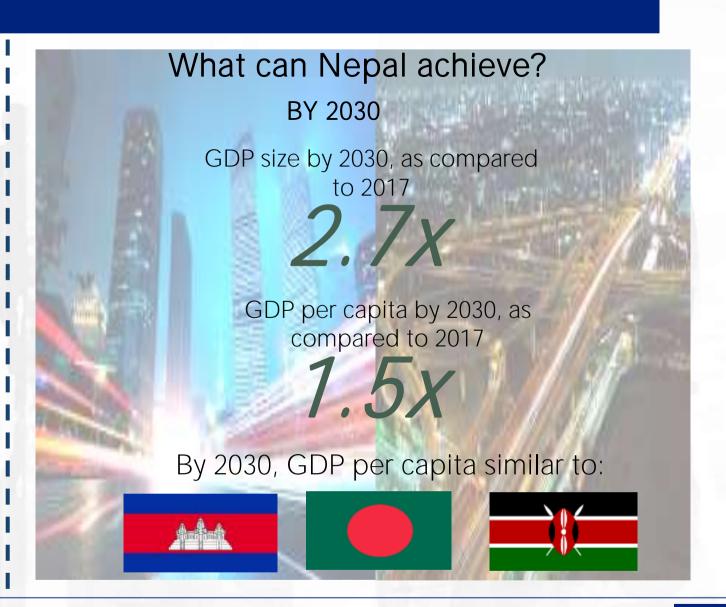
















Challenges of Nepal's Economic Development

3.1%

Low long-term GDP growth rate (2005-2017)

Slow growth in economy impacting job creation

45k

Reduction in labour pool per annum in Nepal

17%

Female participation in non-Agricultural sectors (%female labour)

1.7%

Growth in labour productivity (2011-2017)

Low labour productivity

30%

Remittances as share of GDP

– mostly spent on
consumption

Low propensity to spend on skill development by employees 4.3%

Share of donors contribution as %age of GDP

38%

Trade Deficit As % of GDP Low share of exportoriented sectors in the economy

indicating demand for

low skilled workers

5%

Approx. Share of females in overseas emigration

50%

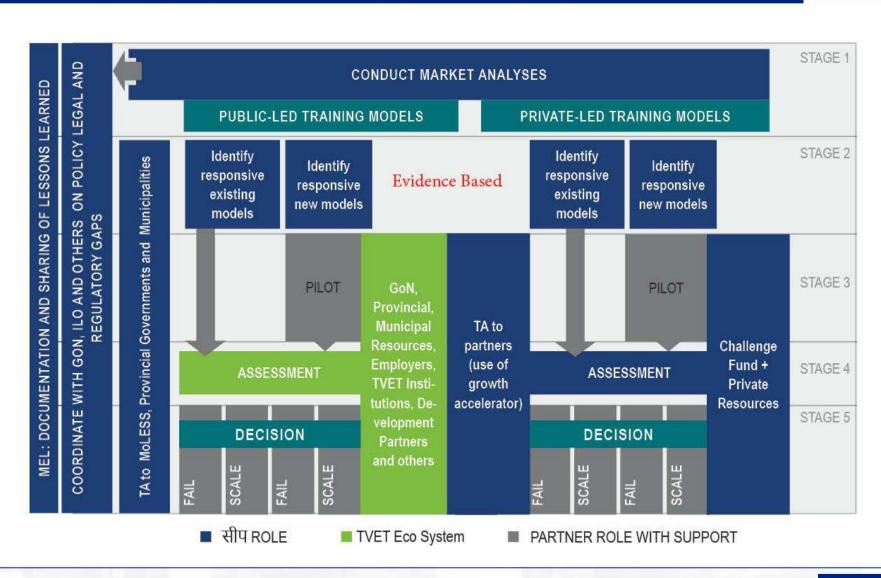
GDP Per Capita as %age of minimum wage





सीप Approach

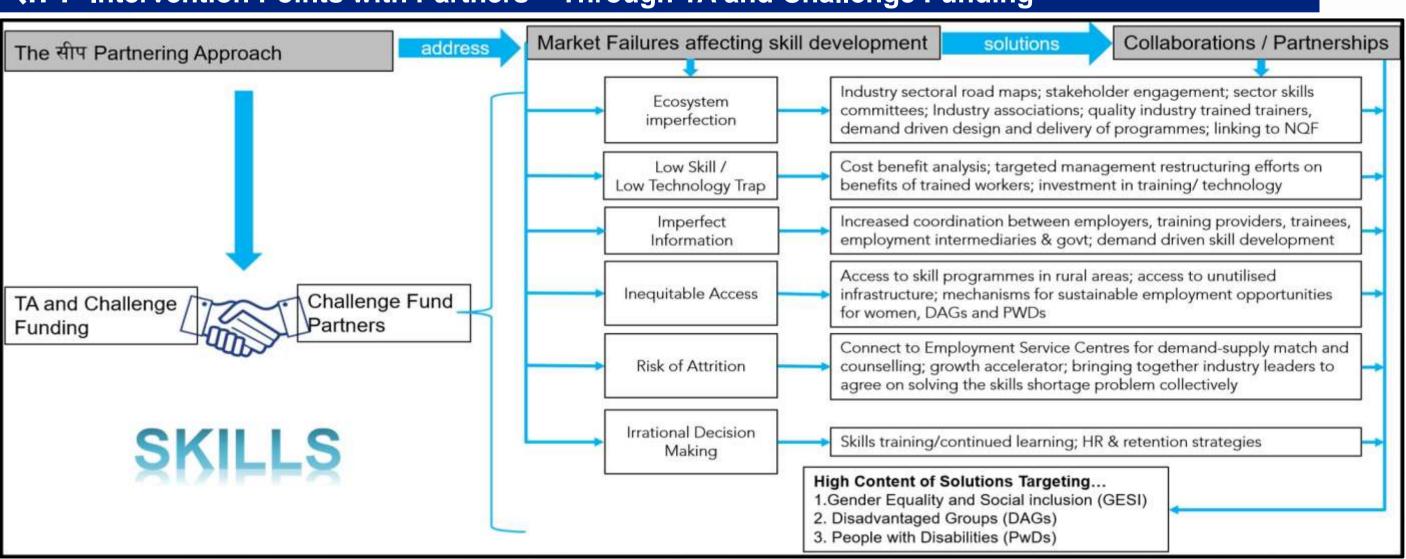
- Mapping skills and migration sector ecosystem; existing skills training and migration management models
- Skills gap analysis by sector and by migration corridors (including in Province 2 and 5) to gauge employment potential and inform innovative models
- Mapping of market failures to develop a structured programme response
- Piloting models and scaling-up what works based on evidence using Challenge Fund
 - o Serving as an enabler for business growth through...
 - o Co-investment approach guided by..
 - o Investment Decision Making Principles.
- Working with GoN (MoLESS; PGs/LGs; ESCs) on PMEP; skilling/migration systems and provincial/municipal skilling/migration programmes
- Coordinating with donors and other programmes







सीप Intervention Points with Partners – Through TA and Challenge Funding







सीप Key Operating Principles

Collaborative:

- o with Moless to promote skilling/migration strategies in support of Prime Minister Employment Programme (PMEP)
- O With Province #5 and #2 on supporting rollout of PDPs aimed at economic transformation and job creation
- o with PM Office and GoN entities on addressing policy/legal and regulatory barriers
- o with industry including anchor firms and industry bodies, including those in host countries for safer and reduced costs of migration
- o with emerging SMEs; entrepreneurs and entities with sustainable skilling models for PwDs
- o with other donors/development partners working in related areas
- Market-led: promoting private-sector/employer led models; including PPPs
- Inclusive: incorporation of PMEP targeted beneficiaries, women, DAGs, and PwDs including in non-traditional sectors
- **Co-Investment:** leveraging PPPs with challenge funding to promote sustainable skills and migration models
- Innovative: adoption, adaptation or invention of new concepts





सीप and Province #5 Leadership- Helping Achieve the Honorable Chief Minister's Vision

- Develop and expand industrial zones.
 Currently, three industrial corridors, and three more are being scoped. 1,500 hectare of land has been acquired in the peripheries of Bhairawa, Nepalgunj and Dang.
- Commercialize agriculture through mechanization, market access, and modern farming methods. Promote organic and offseason vegetables to Northern India given the geography and climate advantage of the hill districts in Province 5.
- Develop/expand custom entry points to facilitate trade across the border with India. Two custom offices currently exist in Nepalgunj and Bhairahawa. Two more were recently opened with potential to open up to a total of 7 custom points in the Province.







सीप and Province #5 Leadership- Helping Achieve the Honorable Chief Minister's Vision

- Transform tourism with focused activities around development and branding of Lumbini, Kapilvastu, and Ramagram—as part of the Buddhist circuit.
- Points in the Mahabharat range can be developed as "hill stations" targeting clients from Northern India.
- National parks and wildlife (e.g. Bardiya, Banke, and Dhorpatan) to be harnessed for tourism.
- Promote medical and education tourism. Eye hospital and medical college in Nepalgunj already attracts large numbers of patients, invest further in medical and education centers in strategic areas, including Lumbini.
- Technical education and skills development be an integral part of the development of the above-mentioned opportunities.









सीप Support for Province #5

- Province #5 economic sectors for SEP skills engagement; emanating from Province #5 Provincial Development Plan
- Working with DFID SEP Partner (ILO) on Provincial Employment Status Report and Skills Gap Analysis (SGA)
- Provincial Skilling Strategy Approach around emerging job occupations with employment potential in identified economic sectors based on SGA
- Strategy for Co-opting PMEP and other related programs into Province #5 Skilling Strategy
- Support PPP between government and private sector on skilling in areas/job occupations and placement in gainful employment as identified in the Provincial Skills Gap Analysis





Best practices in Skill Assessment and सीप Skill Assessment in Nepal



Abhineet Kaul and Dhruba Bhandari, Skills team, सीप







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What are the best practices to keep in mind while designing a Skill Assessment?

8 Golden Principles



1. Start with the Vision of Transformation



2. Study the objectives/ end-goals of the study to identify key indicators to measure



3. Conduct assessment of existing data to develop hypotheses



4. Develop a sampling plan in line with the vision of transformation



5. Identify the various segments for the sample



6. As much as possible, use well-recognized definitions



7. Try to quantify the qualitative aspects as well



8. Finally, test the results with the users





Start with the Vision of Transformation

- > The vision of socio-economic transformation helps to guide the overall study
- ➤ Skill gap assessment in Province 5 is driven by provincial development plan prepared by Province Planning Commission for next 5 years, Honorable Chief Minister's Vision etc.





Study the objectives/ end-goals of the study to identify key indicators to measure

- > The objectives of the study will help to understand some of the key indicators that we need to measure (without fail!)
- ➤ It also guides us to understand the other indicators that are "good to have" but not necessary for the end objectives to be met





#2 - So what guided our approach?

SEEP Impact Statement

More productive and equitable vocational skills and migration systems improving the livelihoods of Nepali

SEEP Outcome Statement

Young people, especially women and disadvantaged groups gainfully employed with higher wages and improved working conditions





Conduct assessment of existing data to develop hypotheses

- ➤ The first step in designing any study is to understand what data exists and what does not also to understand the difficulty/ feasibility of gathering the data required
- An analysis of existing data helps to develop hypotheses to be tested in the study (e.g. relationship between skilling, productivity and wages)





Develop a sampling plan in line with the vision of transformation

- ➤ Identify the key sectors to target for skill gap assessment in line with socio-economic objectives of the study
- ➤ Identify the key players to be included in the survey representative sampling approach





#4 - Identify sectors that are significant to socio-economic growth









Sector	Export Potential			Inclusivity Potential	
Commercial Agriculture	High	Medium	High	High	
Light Manufacturing	Medium	Medium	High	High	
Construction	High	High	Medium	Medium	
Tourism	High	Medium	High	High	
ICT	Medium	High	Medium	Medium	





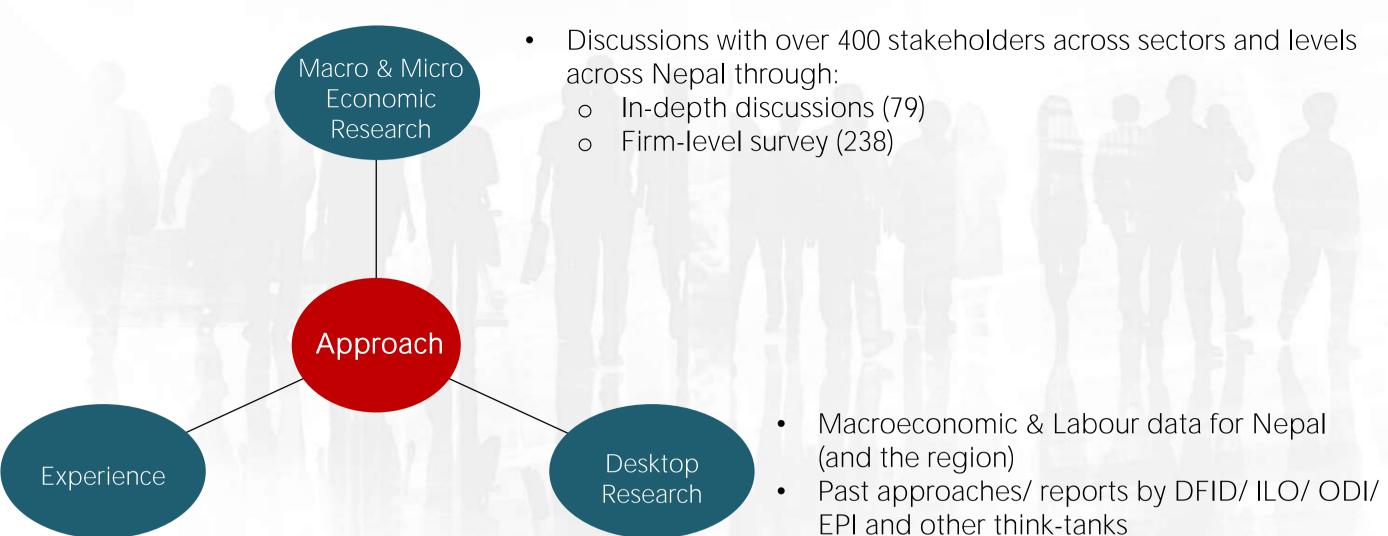
Identify the various segments for the sample

- > The sampling plan should include the mix by demographics (i.e. size of company, origin status, and geographic presence)
- > This should be representative of the overall population in the area under consideration





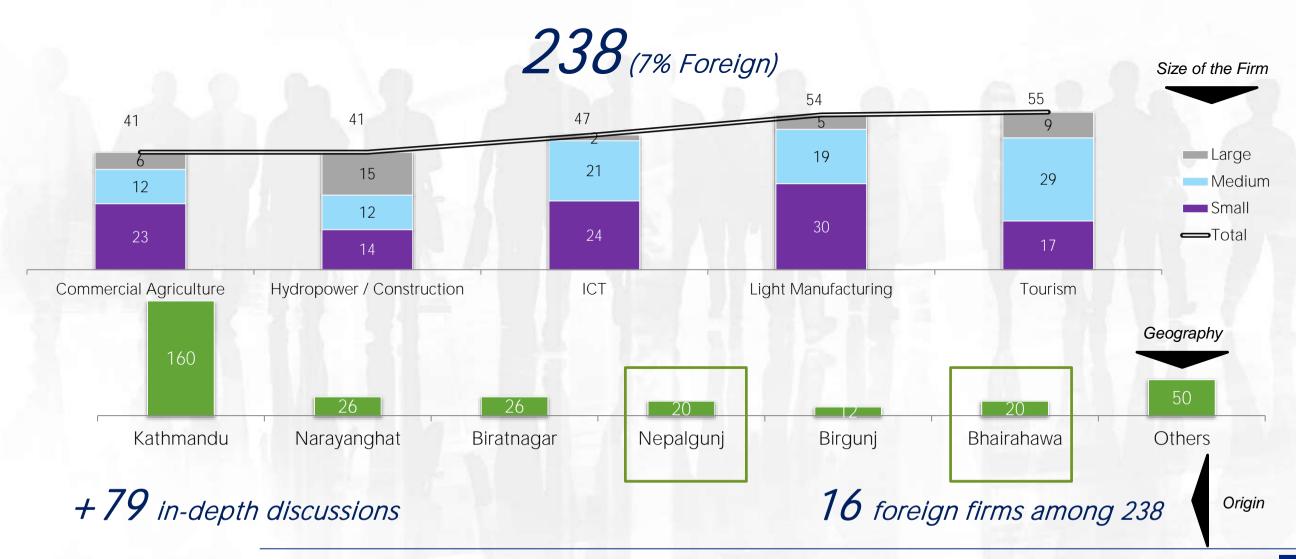
#5 – For Nepal, we conducted research before the survey to understand segments







#5 - And conducted discussions with key stakeholders using these segment







As much as possible, use well-recognized definitions

- > Helps in ease of understanding of the terms used in the survey questionnaire
- > Helps in comparing results across various studies
- > Helps in replicating the study in future





#6 – Using national/ international standards for definitions

Illustrative

Which of these sector(s) best	Commercial Agriculture (including forestry & fishing)
describe your activities?	Manufacturing
	Energy (hydropower incl. construction, electric power generation,
[Single Answer]	transmission and generation)
[Internal Note: All sector/	Tourism (accommodation, travel agency, tour operator, reservation
activities defined based on	service, and related activities)
ISIC Rev. 4]	Information and communications technology
ISIC Rev. 4	Others, please describe

What is the breakdown of workforce in terms of job categories in your company by gender and nationality? [Internal Note: All job categories defined based on SCO-08 Major Groups]

Category	Typical Education Qualification				
Managers, senior officials	Second stage of tertiary education (leading to an advanced research qualification) OR First stage of tertiary education, 1st degree (medium duration)				
Professionals	Second stage of tertiary education (leading to an advanced research qualification) OR First stage of tertiary education, 1st degree (medium duration)				

Out of the following job roles (see next page) for your relevant sector/industry, please indicate which roles do you find challenging to hire Nepalese due to lack of availability of people or skills mismatch [Internal Note: All job categories defined based on ISCO-08 Codes]

Cross-Sectoral	Commercial Agriculture	Manufacturing	
Chief executives, senior officials and legislators	Production managers in agriculture, forestry and fisheries	Engineering professionals	
Finance managers	Supply, distribution and related managers	Manufacturing supervisors	

Which skill sets do you think are critical for these job roles (above)?
[Internal Note: All job categories defined based on International Studies on Skill Assessment)

Category	Examples			
Basic/ Foundation Skills	Foundation skills include the literacy and numeracy skills necessary for getting work that can pay enough to meet daily needs. These skills are also a prerequisite for continuing in education and training, and for acquiring transferable and technical and vocational skills that enhance the prospect of getting good jobs			
Core Work Skills	The ability to learn and adapt; read, write and compute competently; listen and communicate effectively; think creatively; solve problems independently; manage oneself at work; interact with co-workers; work in teams or groups; handle basic technology, lead effectively as well as follow supervision.			





Try to quantify the qualitative aspects as well

- While it is good to know the qualitative feedback; quantification helps to understand the extent of the feedback
- > The quantification can be in terms of Likert scale or Yes/No responses





#7 – Quantifying the qualitative to understand the extent

Illustrative

	What are the top 3 challenges for your company in finding and building skilled workforce? [Multiple answer]	To what degree would employees in your comp
	 □ Lack of management and leadership capability in my team □ Inability to attract skilled workforce at a wage we can afford □ Inability to retain skilled workforce [Note to programmer: Go to Q14 a] 	Skilled employees a easier to retain compared to unskille employees for similar jo
		Skilled employees have faster career progression as compared to unskilled employees for similar jo
	 With the introduction of the new labour law (Nepal Labour Act 2074), how will it impact your ability to hire, retain, and invest in skill development of your workforce?	Skilled employees ea better wages tha unskilled employees f similar job
	a. How do you plan to manage these changes?	

1. To what degree would you agree on the following statements related to skilled employees in your company?

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Skilled employees are easier to retain as compared to unskilled employees for similar job				R	
Skilled employees have a faster career progression as compared to unskilled employees for similar job			1		
Skilled employees earn better wages than unskilled employees for similar job					





Finally, test the results with the users

- > It is always best to test the results with the users to:
 - ✓ Validate the results
 - ✓ Contextualize the results
 - ✓ Deep-dive into the issues and challenges identified in the survey
 - ✓ Find common solutions and next steps





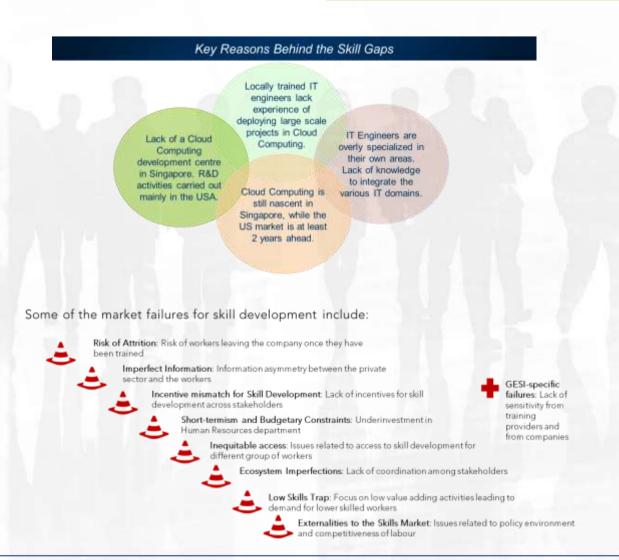
#8 – Test the results: Ideation Labs

Illustrative

At the end of the survey for Nepal, we conducted ideation labs to validate, contextualize and deep-dive into the results

8 ideation labs

117 participants







In Summary, we will keep these principles in mind while designing the P5 assessment

8 Golden Principles



1. Start with the Vision of Transformation



2. Study the objectives/ end-goals of the study to identify key indicators to measure



3. Conduct assessment of existing data to develop hypotheses



4. Develop a sampling plan in line with the vision of transformation



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Methodology and Approach for Skills Gap Assessment and Employment Status Report in Province 5























Presentation Contents

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- 2. IIDS Track Record
- 3. Objectives of the SGA Survey
- 4. Scope of Work
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- 10. Survey Tools

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IIDS Organizational Introduction

- Non-governmental research institution registered under the Societies Registration Act 1977. Established on 25 November 1990; affiliated with Kathmandu University since April 2016.
- IIDS aims to remain Nepal's leading development institute that contributes to evidence-based policy making, trains young professionals, and broadens public understanding of sustainable development challenges in the 21st century across South Asia.
- Over the coming decades, the Institute seeks to reorient and consolidate its priorities by clustering work around themes such as Shared Growth, Resilience, Geo-Strategy, Human Development and Innovation, and Public policy/Governance.
- IIDS is part of the Louis Berger team on UKAid-सीप program.





IIDS Track Record

- IIDS has conducted more than 200 studies/surveys over the last three decades with major thrust in areas such as:
 - macroeconomics, foreign aid,
 - agriculture and rural development,
 - nutrition, population, health, and education,
 - trade and energy, and regional cooperation,
 - family planning, and women in development,
 - poverty alleviation, conflict resolution and sustainable peace.





Objectives of the SGA Survey

The goal of the Skill Gap Assessment is

- to understand the quantum of the skill related challenges and gaps in the six sectors in Province 5; and
- to support to provincial policy makers through evidence based information in order to achieve the economic prosperity within the province through the creation of employment opportunities in growth sector of the provincial economy.

The overall objective of the firm survey is to ascertain key gaps and potential in skills across the 6 sectors (Commercial Agriculture, Light Manufacturing, Construction, ICT, Tourism and Health) and provide an Employment Status Report in Province 5.





Scope of Work

- Estimation of the growth in each of the identified sectors in the next 5 years.
- Identify job roles in demand and the skill gaps based on industries' requirements in Province 5.
- Identify the skill gaps by sector job roles in Province 5 based on the macro, meso and micro analysis.
- Identify skill related constraints faced by industries and capture data for overall skill levels, and the skill levels for each of the sectors in Province 5.
- Estimate total jobs currently being created in non-agricultural sector in Province 5, with details such as salary, gender composition, and ethnicity.





Scope of Work

- Identify how exogenous supply of funds can help address the constraints of growth and job creation.
- Gather secondary information on the registered unemployed to be supported through the Prime Minister Employment Programme, along with data on unemployment.
- Gauge the current status of employment in the identified 6 sectors.
- Provide a skills gap and employment status report with recommendations to policy makers to design the employment component in the Province 5.





Survey Coverage

- Location: Firms / stakeholders based in Province 5. Firms to also be included from the economic corridors (and Special Economic Zones) of Butwal-Bhairawa, Ghorahi-Tulashipur and Nepalgunj-Kohalpur among others.
- **Sectors:** Commercial Agriculture, Light Manufacturing, Construction, ICT, Tourism, and Health in Province 5.
- Mix of companies: Small, Medium, Large, FDIs, Conglomerates, Associations, Training Providers, export-oriented companies, etc. To also focus on companies that have been established in the last 1-5 years.
- Supply-side stakeholders: Private and public training providers segmented by skill categories based on trade/ sectors (number to be determined by team).





Approach and Methodology

- A mixed approach (qualitative and quantitative methods) of using primary and secondary data will be used to carry out the assignment. For this, methodology of desk study and firm-survey will be used. The coverage of the survey will be only for province 5.
- Primary data/information will be taken from the formal sectors functioning in economic corridors in province 5.
- Sources of secondary data will include, among others, local DCCI/CSI chapters, local municipalities, Rupendehi Udyog Sang, Rupendehi Byapar Sang, Butwal Udyog Banijya Sang/Butwal Chamber of Commerce and Industry, Tilotama Udyog Banijya Sang, and Siddhartha Nagar Udyog Sang. Likewise, similar organizations in Banke and Dang districts.





Sampling Design

- Two stage sampling technique to will be used.
- In the first stage, the sectoral firms are divided into four strata according to category.
- In the second stage firms will be categorized by three economic corridors.
- Then, the sampling units will be selected for interview using simple random technique by generating random numbers using mobile application.





Sample Size

- The Skill Gap Analysis uses a total of 200 samples. A minimum of 30 firms per sector, plus a maximum of 20 supply side stakeholders will be interviewed for the purposes of the firm survey.
- The formula for calculating the sample size for Sill Gap Asssessment is:

$$n = (D) (Z^2 * p *q) / E^2$$

where:

n = The required sample size

D = The design effect for two-stage sampling is 2.

Z = is the significant value 1.96, at 95 percent of confidence level

p and q, are estimated at 50 percent. The standard value for this is 0.5.

E, is margin of error. The accuracy of plus or minus 10 percent is expected.

This formula yields 192.08 sample size for this assessment which is rounded off up to 200.





Sample Allocation of Firms by Stratum Overall:

Sectors	Small	Medium	Large	FDI	Total
Commercial Agriculture	9	8	8	6	31
Construction	9	8	8	6	31
ICT	8	8	6	6	28
Light Manufacturing	9	8	8	6	31
Tourism	9	8	8	6	31
Health	8	8	6	6	28
TOTAL	52	48	44	36	180





Sample Allocation of Firms by Stratum

By Corridor: Butwal-Bhairahawa

Sectors	Small	Medium	Large	FDI	Total
Commercial Agriculture	5	4	4	4	17
Construction	5	4	4	4	17
ICT	4	4	4	4	16
Light Manufacturing	5	4	4	4	17
Tourism	5	4	4	4	17
Health	4	4	4	4	16
TOTAL	28	24	24	24	100





Sample Allocation of Firms by Stratum

By Corridor: Ghorahi-Tulasipur

Sectors	Small	Medium	Large	FDI	Total
Commercial Agriculture	2	2	2	1	7
Construction	2	2	2	1	7
ICT	2	2	1	1	6
Light Manufacturing	2	2	2	1	7
Tourism	2	2	2	1	7
Health	2	2	1	1	6
TOTAL	12	12	10	6	40





Sample Allocation of Firms by Stratum

By Corridor: Nepalgunj-Kohalpur

Sectors	Small	Medium	Large	FDI	Total
Commercial Agriculture	2	2	2	1	7
Construction	2	2	2	1	7
ICT	2	2	1	1	6
Light Manufacturing	2	2	2	1	7
Tourism	2	2	2	1	7
Health	2	2	1	1	6
TOTAL	12	12	10	6	40





Survey Tools

This survey will use two tools:

- Structured questionnaires for firm survey, which includes the following sections
 - Section 1: Company Profile
 - Section 2: Questions on growth, export potential and constraints of firms etc.
 - Section 3: Workforce Profile by job roles, skill sets, work force attrition, gender, nationality etc.
 - Section 4: Plan of firms to invest in skill development with appropriate skill development models over 4-5 years
- Semi-structured questionnaire for supply-side stakeholders





Recruitment and Training of Field Researchers

- The supervisors and enumerators will be trained for 3 days. The enumerators' training will be conducted in one of the study areas.
- For the selection of survey suvervisors, the following criteria will be considered:
 - At least Masters degree in Economics/Management
 - Supervisory work experience in at least two surveys
 - Priority is given to locally resident candidate
- For the selection of survey enumerators, the following criteria will be considered:
 - At least Bachelor's degree in Economics/Management
 - Work experience in similar research
 - Priority is given to locally resident candidate





Pilot Tests of Questionnaires

- Two sets of pilot tests of the questionnaire will be carried out in selected private entities.
- In the first phase, a total of 30 tests will be conducted in Kathmandu. Based on the responses, adjustments in the questions will be made.
- The second set of tests will be conducted in Province 5 (location to be finalized) during the training period. This set will also include 30 tests. Based on the responses, the questionnaire will be further revised, if required.





Method of Primary Data Collection

- The firm survey will be conducted through face to face interviews.
- The structured data collection tools will be digitized using ODK application for online data collection system.
- The data collected in the field will be daily transferred to online server, where it will be checked for completeness, accuracy and consistency. If any anomaly is found, the survey team will be notified immediately and instructed for correction.
- The qualitative interviews and meso-level workshops will be conducted by the IIDS core tem members of this assessment.





Survey Fthics and Consent Process

- Data collected for the purposes of this survey will only be used for statistical analysis and will not be used for commercial purposes.
- The study will be conducted in compliance with all human rights and ethical standards required by conducting studies among human subjects on sensitive issues.
- Informed consent will be obtained from all study participants prior to the survey or interview.
- Interview will be conducted in a private place preferably safe place agreed to by the study participants. Study procedure will be designed to protect participants' privacy, allowing for voluntary participation.
- Participants are free to refuse participation.
- Information acquired from the participants will be kept confidential.
- During the analysis and presentation of the study findings, no names or address of the study participants will be mentioned.
- Personal integrity of supervisors and enumerators.





Field Management and Monitoring

- In order to manage the survey with the proper field management, Province 5 government, IIDS, and Louis Berger will form the steering committee, consisting of one member from each entity.
- A monitoring plan will be prepared for this purpose. The monitors will use a checklist for data quality audit purpose which will cover
 - a) study design and methods followed;
 - b) proper selection of participants;
 - c) ethical considerations followed; and
 - d) proper use of data collection tools.





Quality Assurance

The following measures will also be taken for the quality control of data collection:

- Provision of a thorough training for the field researchers,
- Development of research tools that are clearly understood by both the researchers and the respondents,
- Mandatory checking of completed interviews by the field enumerators themselves and then by the field supervisors for the completeness and accuracy of collected information, with online/real-time data collection with GPS code.
- In order to ensure quality data collection, supervisor of each field team will make back-check the data every day
- Application of conflict sensitivity and Do-No-Harm approaches both during the questionnaire design and survey.
- All possible measures will be taken in order to avoid anybody's influence on the respondents.
- Monitoring of field research to ensure that the desired number of interviews are conducted on timely basis, and
- Establishment of a mechanism to ensure that challenges faced in the districts are duly reported and feedbacks are promptly provided.





Work Plan and Timeline

	Tin	Time frame										
	Mc	Month 1 (Weeks)			Month 2 (weeks)			Month 3 (weeks)				
	1	2	3	4	1	2	3	4	1	2	3	4
Desk review of सीप Inception Phase Firm Survey Reviewed and consultation meetings to define methodology, survey tools including separate interview questionnaire for supply-side survey and sampling techniques										9	1	
Draft questionnaires shared with the SEP team					13	1 52						
Survey Methodology Presentation to Province 5 Planning Commission & Leadership						1		W				
Survey Respondents Finalized including private and public training providers in Province 5 for the interviews												
Coding (tablet-form / online) Finalized				y y								
Orientation to Research Supervisors and Enumerators				- Th			4			20	- 6	
Pre-testing and finalization of survey tools completed				-11								
Inception Report Shared									19			
Province 5 Firm-level Survey Rolled Out												
Province 5 Firm-level Survey Completed												
Survey Dataset Cleaned and shared with the SEP team, along with Survey Completion Report												
Data Analysis and report preparation											-71	
Draft Employment Status Report Sharing												
Final Employment Status Report submission												





Key Deliverables

- 1. Inception Report outlining methodology and tools for the survey
- 2. Database of key stakeholders in Province 5
- 3. Database of survey respondents
- 4. Interview guides
- 5. Field work completion report
- 6. Draft survey report
- 7. Final survey report
- 8. Province 5 Employment Status Report





The Survey Team

Core Team

- Team Leader Sudeep Regmi
- Statistician Dharmendra Lekhak
- Research Associate Asmita Adhikary
- Data and System Analyst Anuj Bhandari
- Logistics Manager Shankar Aryal

Field Staff (to be hired)

- Supervisors 3
- Enumerators 6

Qualifications

Labor Economist; PhD in Economics from University of Missouri, USA

Senior Statistician; MSc in Statistics from TU

MSc in International Social Policy from University of Southampton, UK

B.Tech in Information Science & Technology, from K.L University Vijayawada, India

Senior Program Officer; MA in Political Science from TU