NATIONAL HRD DVISORY SERIES 2012

"towards a knowledge based society"

Department of Human Resources Ministry of Labour and Human Resources



NATIONAL HRD ADVISORY SERIES 2012

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Human Resource Development Division Department of Human Resources Ministry of Labour and Human Resources

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FOREWORD

Bhutan has been experiencing phenomenal economic growth. In fact, some international report has described Bhutan to be the fastest growing economy in the world. This is confirmed by the real GDP of 11.8% in 2010. However, on the other hand, Bhutan is experiencing huge gap in the labour market, thus giving rise to unemployment issues. This points out and underscores the critical importance of complementing economic development with commensurate and appropriate human resource development policies, plans and programs.



The National HRD Policy 2010 was developed with an effort to reiterate the importance of human resources to economic growth and social development. The economic goals of a nation can be achieved only by creation of planned human resource development. Currently, different HRD implementing agencies have their own sector's HRD policies and plans, which are neither based on long-term economic direction nor the labour market information. This has ultimately given rise to widened gap in the labour market and unemployment issues.

The Ministry of Labour and Human Resources (MoLHR), as the Ministry for HRD in the country will act as the nodal agency for guiding and steering all the HRD implementing agencies and aligning their plans, policies and activities in accordance to the economic and social need of the country, keeping in view the changing domestic and international environment. To this effort, the National HRD Advisory series has been developed to advise the Royal Government and the different HRD stakeholders on the key HRD challenges and opportunities. The HRD Advisory series shall focus on the training and education needs of the country in the priority areas. The series will be developed on an annual basis to provide HRD advices to all HRD agencies in the country.

The Ministry hopes that the advices highlighted in the series will be taken into consideration for necessary HRD intervention by the different HRD implementing agencies in the country.

Tashi Delek!

Juni)

Dorji Wangdi MINISTER

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INTRODUCTION



A. INTRODUCTION

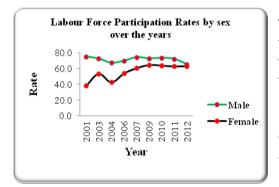
- 1.1 The National HRD Advisory Series has been developed to advise and guide the Royal Government of Bhutan and other HRD agencies on the current HRD priority areas considering the changing domestic and international environment, labour market demands and social expectations. The National HRD Advisory document has been developed to assess current HRD opportunities and challenges in the different sectors of our economy and to guide relevant sectors/agencies towards planned HRD intervention to address the existing mismatch in the labour market.
- 1.2 The present HRD programs are mostly supply driven and does not cater to the long-term economic need of the country nor the current labour market need, which is resulting in wider gap between the demand and the supply of human resources, ultimately leading to unemployment in the labour market. The National HRD Advisory series will aim at reducing this gap through proper HRD intervention and guidance. The series gives HRD advices, looks into the existing and required HRD institutions in the country, highlights HRD challenges and opportunities, and reviews National HRD policy implementation by different agencies.
- 1.3 The current and future development of the country's economy is largely determined by the training and education system. Therefore, the HRD Advisory series shall focus on the training and education needs of the country, with focus on the priority areas.
- 1.4 The National HRD Advisory series has been developed considering the current labour market situation, economic development policies, social expectation and other new development policies of the Government. The series has been developed considering important documents, such as the Labour Force Survey (LFS) 2012, LMI Bulletin, Economic Development Policy, FDI Policy, draft 11th Five Year Plan Document and current government policy documents.
- 1.5 The National HRD Advisory series is based on quantitative and qualitative analysis, and provides broad perspectives on the labour market needs and should be considered for immediate implementation by the relevant stakeholders. However, the supply and demand trend in the labour market is dynamic. Respective HRD agencies/ institute should further carry out their own HRD need analysis as this advisory series gives only an indication of HRD requirement based on the prevailing and current situation of the labour market.

LABOUR MARKET SITUATION

B. LABOUR MARKET SITUATION

The labour market consists of supply and demand of labour force. The supply side represents the number of work force entering into the labour market from schools, colleges, universities, TVET institutes, and other training and educational institution. The demand side refers to number of employment opportunities available in the labour market. The Labour Market Information (LMI) Bulletin of the MoLHR provides the supply and demand trends in the labour market, so that stakeholders can make informed decision on the choice of training and educational programs. The following demand and supply trends in the labour market has been extracted from the LMI bulletin 2011, LFS 2012 and Labour market projection data.

Graph 1: Labour force participation rates



The labour force participation rate as per the LFS 2012 is 64.4%. While male labour force participation has been steady over the year, female labour force participation has gradually increased with increasing number of women getting trained and educated. The LFP rate is 63.2% for female and 65.7% for male in 2012.

The following table shows the distribution of Bhutanese work force in different enterprises. Agriculture is one of the main sectors for employment with 60% of Bhutanese engaged in the Agri-farming. Others are engage in the government, corporation and private sector. However, the following data is constraint to the information and service facilitated through the Department of Employment (DoE) and does not give an overall figure.

	2	2011		2		
Enterprises	15-24	24+	total	15-25	24+	total
Government	4800	41800	46600	3909	40653	44562
Public Corporation	1300	8700	10000	902	8550	9452
Private Corporation	1800	7200	9000	1670	6921	8591
Armed Forces	200	6000	6200	245	4559	4804
Private Business	10600	54200	64800	9778	53121	62899
Agri-farming	28700	157400	186100	27787	169879	197666
NGO/INGO	0	1000	1000	165	1339	1504
Total labour force	47400	276300	323700	44456	285022	329478

Table 1: Labour force sector wise employment for the year 2011 and 2012

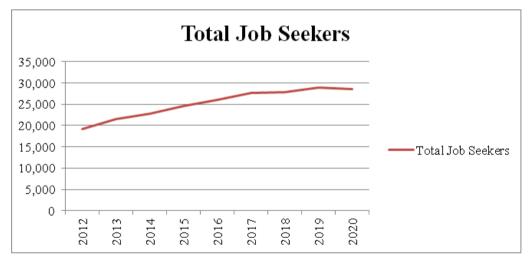
Supply of Labour

The supply side of the Labour market represents the number of job-seekers entering the labour market. The following table gives projection of number of jobseekers that will be entering the labour market and has been calculated based on the population projection and labour market trends.

Level of Education	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cl x studying	10533	14899	15386	15537	16865	16392	15919	15446	14973
Cl xii studying	8946	7163	8070	8939	9232	9322	10119	9835	9551
Cl x job seekers	4156	4213	5960	6154	6215	6746	6557	6368	6178
Cl xii job seekers	5077	6262	5014	5649	6258	6462	6526	7083	6885
Degree job seekers	2,263	2,489	2,713	2,958	3,194	3,418	3,657	3,876	4,109
Job seekers (60%)	11,496	12,965	13,687	14,761	15,667	16,626	16,739	17,327	17,172
Other Job seekers (40%)	7,664	8,643	9,125	9,841	10,444	11,084	11,160	11,552	11,448
Total Job Seekers	19,160	21,608	22,812	24,602	26,111	27,710	27,899	28,879	28,620

Table 2: Projection of job seekers by qualification

Graph 2: Projection of job seekers till 2020



The number of job-seekers is expected to increase over the year. Approximately, 21,000 job seekers will enter the labour market on an annual basis and approximately 122,000 jobs will have to be created in the economy during the 11th FYP period.

Demand of Labour

The demand side represents the demand of labour force in the Government, corporations, private and other sectors. The following table provides a trend of vacancy distribution recorded by the DoE in the four sectors. As seen in the table, job creation in the private sector has been increasing, whereas, job creation has been declining gradually in other three sectors.

Year		Sector							
	Private	Corporation	Government	NGO/INGO					
2003	96	316	1,177	6	1,595				
2004	201	236	1,408	20	1,865				
2005	320	113	1,036	16	1,485				
2006	1757	567	278	13	2,615				
2007	1,300	311	141	0	1,752				
2009	1,004	473	842	49	2,368				
2010	1,865	619	3,119	207	5,810				
2011	3,964	1,349	2,397	71	7,781				

Table 3: Vacanc	v distribution	hy maio	r sectors	over the years
Tuble 5. Vacane	y anstribution	<i>by</i> major	300000	over the years

Table 4: Overall vacancy scenario by sectors and educational attainment, 201	11
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SI.	Category		Total			
No		Private	Corporation	Government	NGOs	
1	Master	13	1	23	1	38
2	Technical	117	105	71	2	295
3	General	327	232	679	57	1,295
4	Diploma	350	144	131	0	625
5	Class XII	341	193	533	3	1,070
6	Certificate	612	131	130	0	873
7	Class X	422	189	316	5	932
8	IX & Below	1,113	311	209	3	1,636
9	Illiterate	669	43	305	0	1,017
	Total	3,964	1,349	2,397	71	7,781

The following projection for the number of jobs to be created during the 11th FYP period has been calculated based on the labour market supply projection and looking into the economic growth sector of the country. Accordingly, job will have to be created to match the supply side of the labour force.

Sector	2012	2013	2014	2015	2016	2017	2018	2019	2020
Agriculture	4945	5576	5887	6349	6738	7151	7200	7453	7386
Hydro Construction	3399	3834	4047	4365	4633	4916	4950	5124	5078
Construction (Non-hydro)	1916	2161	2281	2460	2611	2771	2790	2888	2862
Culture	1298	1464	1545	1667	1769	1877	1890	1956	1939
ICT	1545	1743	1840	1984	2106	2235	2250	2329	2308
Tourism	6057	6831	7211	7777	8254	8760	8820	9129	9048
Total	19160	21608	22812	24602	26111	27710	27899	28879	28620

Table 5: Projection of jobs to be created in 11th FYP period

HRD ADVICE

C. HRD ADVICE

General

- 1.6 Approximately 3,500 graduates with technical and general degree will be entering the labour market annually with effect from 2012. Currently around 500 jobs are created in the civil service sector. This number will gradually decrease each year. Therefore, the private sector will be the main sector for employment. However, working conditions in terms of occupational health and safety, social security, HRD and others, needs to be improved in this sector. Further, green and innovative business should be encouraged through entrepreneurship culture and skills development programs for the youth, so that they are equipped with skills to become job-creators rather than job-seekers.
- 1.7 Career counseling will play a very important role. Youth at middle secondary and higher secondary school should be well aware of diverse career opportunities available in the labour market. The Department of Youth and Sports (DYS) has worked towards integration of career education and counseling programs into the school system and focal teachers have been trained to implement this program. This remains one of the core functions of the DYS. However, the 2008 DYS impact study indicates that only 38% of the youth have benefited from this program. Therefore, there is a need to further strengthen this program and DYS should colloborate closely with the Ministry of Labour and Human Resources (MoLHR).
- 1.8 Human resource development efforts cannot be meaningful and effective unless there are competent and committed HRD professionals. An HRD network consisting of professionals from the private and corporate sectors, government and nongovernment organizations needs to be established, which can be the think tank for all HRD matters. The HRD network may develop linkages and associate with regional and international HRD professional bodies.
- 1.9 Life-long learning is as important as higher education. An individual has to continuously learn to cope with exploding knowledge and emerging skills demand. Therefore, all government, large private and corporate organizations must be made mandatory to provide 40 hour of training per employee per year as required by the NHRD Policy 2010. Incentive in the form of tax exemption to encourage private firms/ organization investing in human resource development of their employees must be considered seriously.
- 1.10 The Labour and Employment Act 2007 states the minimum working condition and requirement in any employing organization operating in Bhutan. In accordance to this Act, all employing organizations are required to provide their Service Rules and Regulations to the Department of Labour (DoL) for endorsement. Therefore,

Human Resource Development (HRD) procedures, eligibility and other guides should be made mandatory and feature as one of the components of the Service Rule, so that HRD functions are well integrated in an organization.

- 1.11 Unemployment is a big concern for the Royal Government of Bhutan. However, placing scarce human resources for employment outside Bhutan should be the last resort for resolving this issue. Therefore, HRD plans and strategies should, as far as possible cater to the domestic HRD requirements and needs.
- 1.12 While female participation in the labour force has steadily increased over the year, their engagement is confirmed to certain sectors only. The LFS 2011 indicated that female participation is more than 55% in agriculture, manufacturing and trading sector, which require more effort and less capital. Female participation is comparatively lower in sectors that require higher academic education. Therefore, planned HRD intervention needs to be made to address the latter issue.

Technical and Vocational Education and Training (TVET)

- 1.13 TVET will play a critical role in skilling Bhutanese and in gainfully employing them. The paradoxical situation of unemployment on one hand and employment opportunities on the other hand is mainly due to lack of skilled Bhutanese in the labour market. Therefore, relevance, quality and speed should be the salient features of technical and vocational education training. Vocational education should be planned in accordance with the emerging labour market demand. The existing TTIs need to introduce new courses that have market demand and are attractive to the students. In addition, the TTIs also need to explore conducting short-term pre-service training as employment promotion strategy and in-service training to enhance the productivity of workers. However, the TTIs should not compete with the private training providers in any training program. Conducive policies should be in place to encourage a vibrant and dynamic private sector participation in the HRD/TVET system in the country.
- 1.14 The current demand for the TTI graduates are mainly from the Hydropower and construction projects. On the other hand, the current production of TTI graduates is around 200 per year. Furthermore, the training is unable to suit the real need of the industry. Therefore, there is need to improve on the quality as well as the quantity aspect of it. The TTIs should explore attachment/ internship into major construction projects of the Government, such as the Education City Project, Hydro power projects and others. These attachment / internship should be monitored and should be result oriented.

- 1.15 The Establishment Regulation for Training Providers encourages establishment of HRD/TVET institutions in the Country by private players. The Government will have to work closely with the private sector to ensure that such establishments are guided and meets the training requirement of the industry at all times.
- 1.16 There is need to introduce Entrepreneurship Development Programs (EDP) modules in the Technical Training Institutes (TTI), whereby the TTI graduates can be trained for self-employment. Further, there needs to be a good linkage or transition between the existing skills/TVET program and the entrepreneurship programs.
- 1.17 The Department of Employment (DoE) and the Department of Human Resources (DHR) need to strengthen its collaboration in counseling job seekers and middle/ high school students on the labour market demands.
- 1.18 Construction courses should focus on mechanization and automation of construction activities so that productivity of the Bhutanese construction workers could be enhanced. For this purpose the TTIs should be given relevant resources, in terms of human, financial, equipment and required infrastructures. Further, the construction curriculum may also need to be revised. Specialized construction courses should be introduced in the construction sector, to equip the Bhutanese construction workers with skills that are in short supply and are not easily available in the market.
- 1.19 The Ministry of Education (MoE) needs to seriously consider, integrating introductory modules on TVET programs in the Middle and Higher Secondary levels to expose students to vocational programs and to generate interest among the youth for TVET programs. The current arrangement of Vocational clubs needs to be reviewed for its effectiveness. The Ministry of Labour and Human Resources (MoLHR) should provide technical support and guidance to the MoE to undertake this initiative.
- 1.20 The current capacity for the instructors in the TTIs needs to be built through skills and qualification up-gradation. Further, private TVET providers needs to be supported in terms of Training of Trainer (TOT) program, curriculum development support, registration (both trainers as well as training providers), National Certification (NC) and accreditation.
- 1.21 All the existing TTIs and IZCs should be consolidated and restructured as Centers of Excellence. However, it is important to note the HRD challenges faced by the existing institutes in terms of managerial and instructors' capacity. Therefore, the

DHR should to take necessary course of action to build managerial and instructors' capacity to take this vision forward. Furthermore, all institutes should have a character, a purpose and a vision of its own.

- 1.22 The upcoming National Institute of Technical Education (NITE) will play an important role in both short-term and long-term HRD capacity development of all TVET providers in the country. It will also ensure adequate supply of qualified trainers and instructors and assist the training providers in terms of developing quality curriculum and learning resources. However, to make NITE operational and to achieve its vision of becoming the *Center of Excellence for Technical Teacher Education and Curriculum Research Work,* it needs to be equipped with professionals. Therefore, DHR should explore networking with similar globally reputed institutes and capacity development of the institute.
- 1.23 Besides the quality and quantity aspect of TVET, the MoLHR should simultaneously work towards good advocacy programs to override prevailing prejudice against manual labour and TVET. The MoLHR should work towards creating excellent work culture/values among Bhutanese and appreciation for TVET through strengthening of programs such as skills competition, media advocacy programs, success stories, industry partnership, skills and craftsmanship day/month, etc.

Hydropower and Energy

- 1.24 The 10 Hydropower projects which will generate 10,000 MW of electricity by 2020. By then, additional hydropower projects may also be initiated. This will require large number of civil engineers during the construction phase and electrical and mechanical engineers during the operation phase, both at degree and diploma level. Therefore, it will be advisable to increase the intake into civil engineering courses at the College of Science and Technology in order to meet this requirement. Furthermore, technical and vocational training in this field at diploma level needs to be introduced in the new/existing TTIs. However, proper planning needs to be in place in order to gradually replace the intake of civil engineering course with electrical and mechanical courses.
- 1.25 Since the 1960s, Bhutan has endeavored into Hydropower construction through foreign technical expertise. There has not been any significant knowledge transfer in this field. With the current hydropower construction projects, Bhutan should aspire to build technical expertise and skill in this field so that in future, technical assistance can be provided to other countries venturing into hydropower construction projects.

1.26 Bhutan currently depends largely on the Hydropower energy due to its rich river sources. However, with global warming and environmental changes, it is important for Government to invest in training and education in alternative mode of energy generations; wind, solar and others. Therefore, bachelor and post-graduation degree in the field of alternative and new form of energy should be explored.

Construction

- 1.27 Construction is the major employing sector in the country and will continue to be so for the next 20-30 years, due to its labour intensive characteristic. Currently, Bhutan has 55,000 foreign expatriate working in the country, out of which 41.8% are working in the Hydropower construction projects in various construction trades and 36.7% are working in private and government construction. However, on the other hand, there are 6,904 unemployed in the labour market (LFS 2012). This presents a paradoxical situation where unemployment co-exists with employment opportunities in the labour market. One major intervention to resolve this would be to skill our youth in construction trades, upscale intake in TTIs, and improve relevance of the training to the requirement of the construction industry.
- 1.28 While construction is one of the major sector contribution to the Nation's GDP (14% in 2011), it employs only 1.4% of the total Bhutanese labor force. Currently, this sector caters to the employment of the expatriate workers, therefore Bhutan has not been able to harness the employment opportunities offered by the sector. There should be proper replacement strategies in place so that Bhutanese can take up construction related occupational trades, such as, site supervising, plumbing, electrical wiring, fitting and fixture, carpentry, tile setting, interior designing, etc which requires higher level of skill and work competency.

Education

- 1.29 The Establishment Regulation of the Ministry of Education (MoE) provides avenue for establishment of private colleges in the country. However, it is important for the MoE and the RUB to see that these colleges meet the present and future requirement of the economy and does not result in oversupply of graduates in fields not required by the economy.
- 1.30 The current Tertiary Education system needs to be dynamic. Therefore, course curriculum, course content and others should respond to the labour market need.
- 1.31 If the current trend of supply of graduates especially in the field of Business Administration, Commerce, general Arts and Science subject, Information and Communication Technology and Computer Application from both within and outside the country continues, there will be large pool of un-employed graduates by the end of 11th FYP. The MoLHR therefore, needs to carry out an exercise to

facilitate employment for these graduates if the government is to maintain full employment of 97.5 % and youth unemployment rate at 5% in the plan period. Further, the HRD agencies, namely the Department of Adult and Higher Education (DAHE), Ministry of Education (MoE) and Royal University of Bhutan (RUB) may like to review enrollment of students in these fields in various colleges, in and outside Bhutan to avoid unemployment of graduates and under utilization of human resource. The MoLHR on the other hand may need to step up its Entrepreneurship Development Program for graduates as an alternative employment strategy.

- 1.32 The Education City project will be an important initiative in tertiary education inviting global partners in tertiary education. Though the project is still at inception stage and will require another 4 -5 years to take its physical form, the project will require manpower during the implementation as well as completion stage. Appropriate HRD need analysis should be carried out and HRD capacity should be built accordingly. Internship programs in these kinds of projects should be considered for local capacity development and knowledge transfer.
- 1.33 Due to the lack of domestic intake and limited government scholarship offers for higher education, majority of students (almost 40% and above annually) choose to study in colleges and universities outside Bhutan on private funding. While the quality aspect of the colleges and universities for the 60% is closely scrutinized by Royal University of Bhutan (RUB) and Ministry of Education (MoE), there is no such assurance for the other 40%. Therefore, there is a need to guide students wanting the study outside over their choice of universities and colleges to assure learning and national HRD.
- 1.34 The Asian Development Bank funded study on Bhutan-Human Capital development, constraints and opportunities gives a comprehensive study, analysis and recommendation for the education sector, which can be considered for implementation by the education sector and agencies.

Health

1.35 There is shortage of medical and para medical personnel especially General Nurses and Mid-wives. While the shortage of Doctors could be met from the upcoming medical college or by sending more students outside Bhutan under donor funded Scholarship program, the acute shortage of Nurses need to be met by establishment of a Nursing Institute within the country preferably by private firms, and if not forthcoming by the RUB.

ICT

1.36 ICT has been identified as one of the priority sectors in the country. However, employment in this sector has been rather low. Currently there is a large pool of unemployed ICT graduates. The recent establishment of IT Park has not resulted in generation of jobs for IT specific graduates but rather in the field of BPO and other ICT enabled services. Therefore, the Ministry of Information and communication (MoIC), as the focal agency for this sector, needs to carry out a study to find out what kind of jobs will be created by the growth of this sector. HRD planning and intervention should be done according to this study.

Agriculture

- 1.37 As per the Labour Force Survey (LFS) 2012, 60% of the Bhutanese labour force is engaged in the Agriculture sector. Agriculture, though a primary sector, will continue to be one of the major sectors in terms of employment as well as revenue generation (19% of GDP) for the country. This sector also provides its support to the tertiary industry, specifically the agro-based industries in the country, with direct correlation in its growth and productivity. Therefore, there is need to build capacity of this sector in agro and food based production in the area of organic farming, agro-processing, biotechnology, forest based products, floriculture, health food, animal feed, apiculture, horticulture and dairy. Further capacity needs to be built in marketing, packaging technology and mass scale production of Bhutanese agriculture produce.
- 1.38 Production of general Agriculture and Veterinary Science graduates through Gol Scholarship Program or in-country program needs to be reviewed. Instead, focus should be on producing Agriculture Economist and Livestock Production professionals. Since these degree programs are not available either in India or in Regional/ South East Asian countries; the Royal University of Bhutan (RUB) may consider introducing these two programs at College of Natural Resources (CNR). The programs should have international outlook in their curricula, training, research and student activities to market the program at regional and international level. Therefore, it will in the long run not only solve the limited demand of the agriculture sector but also help Bhutan emerge as an education destination for these two degree programs.
- 1.39 To fulfill the Royal Government's vision of attaining 'food self-sufficiency', conducive policies need to be in place to attract youth into this sector through farm mechanization, commercial farming, organic farming, packaging technology, marketing, entrepreneurship skills etc. The Ministry of Agriculture and Forest (MoAF) needs to explore collaborative efforts with the MoLHR and Ministry of Economic Affairs (MoEA) in this regards.

Tourism and Hospitality

- 1.40 With effect from 2012, Bhutan will receive 75,000 to 100,000 tourists annually; therefore, the existing hotels and the new hotels will have huge demand of human resources, especially in the areas of Housekeeping, Front Desk Management, Bar Tending, Event Managers, Waiter/Waitress, Cooks and others. Currently there are two registered training providers in Hospitality and Tourism, one private and one under the direct administration of Tourism Council of Bhutan (TCB).
- 1.41 The existing hospitality and tourism institute should venture into diploma and degree program and new hospitality institutes should be encouraged, one in Central region and one in Southern region.
- 1.42 TCB needs to give priority to Community tourism, cultural tourism and eco-tourism programs to sell Bhutan as a unique destination. Further, foreign language training needs to be incorporated in guide training programs.

Transportation and Communication

- 1.43 In accordance to the Bhutan Transport 2040 Integrated Strategic Vision, Bhutan will explore possibility of ropeways and tunneling. Bhutan will also venture into new technologies such as railway transportation. Therefore, it is necessary for HRD intervention in the field of these technologies so that Bhutan has its own capacity built, in taking this vision forward.
- 1.44 Due to the geographical terrain of the country, bridges and road construction/ maintenance/ re-construction is an important aspect and will continue to be so. Thus far, Bhutan has been relying on foreign capacity and expertise on the construction of roads as well as bridges. Therefore, its high time that Bhutan builds its technical expertise in this area.

Micro, Small and Medium Enterprise (MSME)

- 1.45 MSME will play an important role in revenue and employment generation in the 11th FYP period. Therefore, Entrepreneurship Development Program (EDP) should encourage youth to come up with green and innovative MSME. Conducive facilities such as skills training program, entrepreneurship program and fund facilities should be made available to encourage MSME industries.
- 1.46 Most Government program caters to the economic need of the country. However, creative industry in the field of animation, designing, new product development, green technology, writing, arts and music, photography, graphic arts, cooking food sciences and others should also be encouraged and supported through skills training program and entrepreneurship programs.

1.47 The MSME should be supported in terms of specific in-service HRD programs and training that will enhance growth and employment generation in the sector.

Urban Planning

1.48 Rural-Urban migration is a trend that will continue to grow with more economic and employment opportunities being made available in the urban areas. Besides social issues, urban centers will be faced with challenges such as water management, solid waste management, urban planning, town planning, pedestrian planning, disaster mitigation planning, and sewerage management and planning. Therefore, there will be need to develop HRD capacity in these areas so that our urban centers are well planned and conducive for living.

EXISTING AND REQUIRED HRD INSTITUTIONS

D. EXISTING AND REQUIRED HRD INSTITUTIONS

Bhutan currently has 77 registered TVET providers in the field of ICT, Health, RNR, Construction, Arts and Craft, Animation and Graphics, Hospitality and Tourism, Transportation and management, catering to the various training and development needs of the country. From the 15 government institutions, 8 are under direct administration of the DHR, MoLHR and 7 under the direct administration of other line Ministries. 34 of these are private training providers in the field of basic ICT and basic financial management and accounting courses. Others are in the field of hospitality, language and management training. All these institution are currently providing only certificate level courses including the government owned institutes.

The RUB on the other hand has 10 colleges under its administration. These colleges cater to tertiary education in the field of civil, mechanical, electrical, business management, arts, general sciences and ICT. There are few other HRD institutions which are neither registered with the MoLHR nor the RUB. These institutions cater to the Arts and Craft, Agriculture and other HRD needs of the country. Very recently, RIM has introduced two masters program in field of business management and public management.

Furthermore, institution like the Royal Civil Service Commission (RCSC), DAHE and DHR cater to various training and education needs in the country. While the RCSC is mandated to plan and implement HRD of the civil service sector, the DHR is mandated to plan and implement HRD of the private and corporate sector. DAHE on the other hand is responsible for tertiary education in areas that are not available in the country.

To attain Bhutan's vision of becoming a knowledge society, it is important for all these HRD institution to play a vibrant and dynamic role. HRD intervention should be initiated in accordance to the economic direction of the country and the labour market need, and that promotes life-long learning. The following table will give a brief outlook on the existing HRD institutions and also provide recommendation on the institution or courses required, looking into the current labour market scenario.

Table 1: Existing	and roquiroc	linctitution	in DND
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Existing HRD intuitions	Required HRD institutions
College of Natural Resources (CNR) - Diploma	Bsc. in Rural Development
and Degree in Agriculture, Forestry and Animal	Bsc. in Environmental studies
sciences.	Bsc. in Agriculture Economies
	Bsc. in Livestock Production
	Master degree (Msc.)
Ugyen Wangchuck Institute of Forestry and Environment (UWIFE) - certificate courses in Forestry and Environmental Conservation	Diploma programs
Rural Development Training Centre (RDTC) - agriculture skills training program, farm management program, group management, and youth awareness program.	Provide certificate Level courses for school leavers and farmers and give more focus on rural entrepreneurship

Table 2: Existing and Req	uired HRD Institutions	in the Tourism	and Hospitality
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Existing HRD Institutions	Required HRD Institutions
Training Unit under Tourism Council of Bhutan (TCB) – provides various in-country and ex- country training for the in-service	Eco Tourism, community tourism, language training and cultural tourism
Royal Institute for Hospitality and Tourism (RITH) - Diploma in Hospitality and Tourism Management	Should provide specialized skills in cooking, front desk and other hospitality fields
	Bsc. in Hospitality and Tourism Management
Tourism (BISHT) – certificate/Diploma courses in Front Desk, certificate course in culinary arts and cooking, housekeeping, spa and therapy, bakery,	Diploma in Hotel Management program
	Diploma in culinary arts and commercial cooking
	Diploma in bakery and confectionery
	Diploma in Front Desk Management
	Private Hospitality training provider in Central Bhutan and South Bhutan
2 IZCs, CTAS and RTA providing local arts and craft training	Strengthen IZCs, CTAS and RTA

Existing HRD Institutions	Required HRD Institutions
College of Science and Technology (CST) – B.E in Civil, Electrical and Electronic & Communication	M.E (Hydropower)
Jigme Namgyel Polytechnic (JNP) – Diploma in	B.E (Mechanical)
Civil Engineering, Electrical Engineering and Mechanical Engineering	B.E (Surveying)
	Diploma (Surveying)
	Diploma (ECE)
Technical Training Institutes (TTIs) – Certificate in Civil, Mechanical, Electrical and Electronic at NC-1 and NC-2	Diploma programs introduced and courses at NC-3 level
Weak collaboration with hydropower construction project – no knowledge transfer	Strengthen internship programs for students at JNP, CST and TTIs in major hydropower construction project to ensure knowledge transfer and learning.

Table 3: Existing and Required HRD Institutions for the Hydropower

Table 4: Existing and Required HRD Institutions	for the Construction industry

Existing HRD Institutions	Required HRD Institutions
CST – no degree in urban planning and	M.E (Architecture)
architecture	M.E (Urban Planning)
Weak role of the CAB in HRD interventions	Strong role of the CAB in HRD interventions
Technical Training Institutes (TTIs)	Strengthened TTIs and at least one TVET Institute should be developed to specialize in construction related education. Construction machinery courses
Weak collaboration in major Government Construction Project	Internship and attachment program for students from TTIs and CST in major Government construction projects

Table 5: Existing an	d Required HRD	Institutions in ICT
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Existing HRD Institutions	Required HRD Institutions	
Private training providers focused on low end ICT skills	Private training provider focused on middle and high end IT skills such as animation, graphic, web design, multimedia, etc	
Colleges providing BSc. in Computer Applica- tion and IT	Discontinue BSc. in Computer Application and IT course and introduce B.E in IT	

The existing HRD Institutions	Required HRD Institutions	
Gaeddhu College of Business studies – BBA and B.Com	MBA (Finance) B. Economic	
RIM – PFDFM and DFM for government sector only	PGDFM and DFM course for private sectors	

Table 6: Existing and Required HRD Institutions for the Financial Services

Table 7: Existing and Required HRD Institutions and courses in Health

The existing HRD Institutions	Required HRD Institutions
Royal Institute of Health Sciences (RIHS) – BSc in Public Health and Diploma in General Nursing and Midwifery	B.Sc Nursing Pharmacy training for private sector
National Institute of Traditional Medicine (NITM)	National Institute of Traditional Medicine (NITM
No medical college	Bhutan Medical College (Courses needed such as MBBS, MD, MS in all specialties, BDS, MDS, B.Sc. (Biotechnology) B.Sc. (Lab Technology, biotechnology, radiography, etc), (B.Sc. & M.Sc. Nursing)
No private training provider in Nursing	Private training provider – Diploma in General nursing and midwifery, B.Sc in nursing.

Table 8: Existing and Required HRD Institutions for Faculty/ Instructor capacitydevelopment

Existing HRD Institutions	Required HRD Institutions
Samtse College of Education	Samtse College of Education (With degree, masters and doctoral courses)
Paro College of Education	Paro College of Education (With degree and masters courses)
Sherubtse College	Masters in English Language Teaching (Both PT and FT)
Technical and Professional Service Division (TPSD), DHR	NITE – diploma programs for TVET instructors, TOT programs

HRD INITATIVE AND INTERVENTION

E. HRD INITATIVE AND INTERVENTION

The National HRD policy 2010 envisions 'a knowledge based society with citizen of high employability, entrepreneurship and productivity and with unique principles and values that foster GNH'. The policy covers tertiary education, TVET, training and development, human capacity development and mechanism for implementation. The main objective of the policy is to:

- Create human capital to realize development of Bhutan as a knowledge-based society,
- Strengthen the existing HRD institutions,
- Plan for required HRD institutions,
- Support agencies in planning and developing their sectorial HRD needs by providing broad direction to them,
- Promote coordination among different HRD agencies in implementing various HRD activities,
- Develop HRD professionals,
- Study labour market periodically and to make projections of future labour market scenario, and
- Increase employability of, and employment for Bhutanese youth.

The MoLHR, besides the responsibility to develop the National HRD policy, will monitor and assess various HRD policy interventions. The MoLHR will also play a coordinating role for overall HRD activities. The following table will provide some of the major HRD intervention taken up by various stakeholders as highlighted in the National HRD policy and provide future course of action to be taken by the relevant agencies.

SN	Main activities planned/ proposed in the National HRD Policy	Status	Proposed Future Actions	Focal Agency
1	MoLHR shall be the apex agency for developing, facilitating and coordinat- ing HRD plans, services and activities. It shall have the responsibility for the development of national HRD policy	The National HRD Policy function is currently under the Department of Human Resources (DHR), MoLHR. DHR is also responsible for the TVET sector and there is lack of capacity and focus within the DHR to implement the policy.	There is need to de-link National HRD functions from the DHR and to create a separate Department/ Bureau under the Ministry that will be responsible for National HRD function, HRD Research and LMI.	MoLHR

2	Promulgate a holistic National HRD frameworks	There is lack of synergy and coordination among different HRD implementing agencies, each working on their own mandates and visions.	Promote and organize Annual/ Biannual HRD conferences and exchange of ideas and expertise at local as well as regional level.	Molhr
3	Ensuring a national HRD framework for planning, implementation, and evaluation	No such instrument till date at the national level	Develop and issue the national HRD Roadmap from the onset of 11 th FYP planning period	Molhr
4	Develop an HRD Network of professionals from the private, corporate, government and non-governmental organizations	No coordinated HRD Network till date	Develop an Association of HRD professionals in the country which can be think tank for all HRD matters	Molhr
	organizations		Organize National HRD Conferences annually	
5	Both public and private educational institutions shall develop international character, develop multiple academia collaborations with regional and international institutions for exchange of students and faculty, development of materials and conduct of seminars and conferences	Some colleges under RUB and RIM already are building collaboration with the regional and international students and institutes The new Education City Act is expected to encourage FDI players in the education and HRD sectors	Collaboration of the existing institutions with the regional and international institutions must be encouraged with incentive from the Government	MoE, RUB, RIM
6	Post graduate and doctoral level management education shall be provided	RIM has already introduced in-country master degree programs in Public Administration and Business Administration.	Diversify masters program in other field as required by the labour market, not only in RIM but also in other RUB administered colleges and institutions	RUB, RIM
7	Entrepreneurship education and Development to be promoted	Entrepreneur curriculum has been well integrated in RUB owned colleges.	Initiate introduction of EDP in the TTIs, so that TTIs graduates are well equipped with entrepreneurship skills and there is scope of self-employment after graduation.	DHR

8	Bhutan Vocational Qualification Framework (BVQF)	The BVQF has been developed and is being implemented. TVET has been linked with the tertiary and higher education through the development of linkage policy under the framework	The BVQF is currently being implemented for NC 1 and NC 2. The framework needs to be developed for NC 3. There is need to align courses provided by private TVET/HRD providers in accordance to the framework	DOS
9	National Qualification Framework (NQF)	The NQF has been developed and incorporated in the Tertiary education policy. Flexible career pathways between general education and vocational training has been created	The NQF needs to be enforced and public awareness needs to be created, especially in schools and TTIs.	MoE
10	Quality Assurance of TVET providers. Both government and private sectors shall be registered with and accredited by MoLHR	The Registration Regulation and the Accreditation Guidelines are in place. Registration is mandatory for all TVET/ HRD institutions in the country	Tie up Registration with the renewal of institute licensing system. Though this is incorporated in the Registration Regulation, it is not incorporated in the Licensing guidelines of the MoEA. PPP priority should be given to registered training providers and accredited training programs.	DOS, MoEA, DHR
11	Assessment and certification of non- formal vocational training	Recognition for Prior Learning (RPL) has been developed and is in place. RFP is provided for NC 1 to NC 3 level.	RPL needs to be enforced and public awareness needs to be created to encourage RPL among skilled	DOS
12	Introduction of vocational education in Lower and Middle Secondary Education	The MoE has recruited and placed multi- skilled instructors in nine schools. However, implementation at ground is weak.	MoE needs to prioritized integration of TVET into the school education for preparing students for the world of work	MoE, MoLHR

13	Development of Faculty and HRD professionals	Faculty Development is high priority in the Primary and Tertiary education system. Accordingly opportunities for continued learning and post-graduation studies are made available to the primary and tertiary faculty.	Instructors' capacity development in the TVET sector needs to be given high priority. Diploma programs for institutors of TTIs and exchange program with globally reputed institution needs to be given priority. Incentive to encourage graduates into the field of education needs to be explored.	MoLHR, RCSC, RUB, MoE
14	All government, large private and corporate organizations shall be encouraged to provide 40 hours of training per employee per year		This policy needs to be incorporated into the Labour and Employment Act. Accordingly, amendment should be made in the Service Rules and Regulation of each organization/ agencies.	MoLHR, RCSC
15	The MoLHR shall establish a Secretariat that will be responsible for planning, coordinating, implementing and monitoring the National HRD policy	Secretariat not yet established. The National HRD functions are currently being implemented by DHR	A separate Department or Bureau must be established to ensure proper coordination of national HRD plans and policies	Molhr
16	Regular research shall be done to examine the quality and effectiveness of HRD services provided by different agencies	The current LMI Division under the DoE carries out only labour and employment surveys and does not carry out any research and HRD survey functions.	The LMI Division needs to be strengthened and realigned with the National HRD functions of the MoLHR. The functions and scope of LMI needs to be diversified and strengthened.	Molhr

