History, Present Status and Prospect of Veterinary Education in Nepal

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**Abstract** 

Nepal is an agricultural country. About 62 % of total population depends on agriculture for their

livelihood and employment. Agriculture contributes about 33% of national GDP and 25 % of

which is contributed by livestock sector. In order to get maximum benefits from livestock sector,

good management practices and health care aspect are the crucial parts which could be achieved

by quality veterinary services from veterinary professionals and veterinarian. There are only 4

educational institutions in Nepal which offer veterinary education specially B V Sc and A H

course. They enroll 196 students per year. Till March 2024, there is 1982 NVC registered

veterinarian in Nepal out of which nearly 25 % are living abroad. NVC is the authorized statutory

body of Nepal government which formulates quality standard of veterinary educational

establishment, licensing of veterinarians and impose code of conduct of veterinarians for

veterinary services. There is increasing scope of veterinary services in Nepal but existing number

of veterinarians is very low compared to total livestock heads and pet population. Small number

of veterinarians has difficult to provide quality services personally to the farm animals and pets.

So, all educational institutions and other stakeholders should think about the production of

adequate number of qualified veterinary graduates in order to fulfill the need of the nation.

**Key words:** Veterinary Education, Livestock, Veterinary Services, Municipality

Introduction

Nepal is agriculture-based country with about 62 % of total population still depends in agriculture

for their livelihood and employment. Agriculture sector contributes approximately 33% of

national gross domestic product (GDP) and livestock is one of the major components which

contribute about 25% to the agricultural GDP. There are approximately 7.5 million cattle, 5.1

million buffalo, 0.8 million sheep, 13.4 million goat, 1.5 million pig and about 75 million poultry birds in Nepal. Out of above only about 25 % are managed commercially and rests are reared by traditional ways by small farmers (Statistical Information on Nepalese Agriculture, 2021/22).

There is an increasing trend of rearing pets specially dogs and cats in city areas like in Kathmandu, Chitwan, Pokhra, Biratnagar, Butwal, Nepalgunj, and other urban and peri-urban areas. They require substantial numbers of vet doctors for regular preventive medical care, birth control, and diagnosis and treatment of surgical and medical cases. Many animal welfare organizations are involved in Nepal who seeks regular veterinary service, vaccination, regular health care, and birth control, rescue of injured street dogs, and rearing in shelters.

Till date, a total of 1982 veterinarians have been registered with NVC (Nepal Veterinary Council 2024) and about one fourth of them is in foreign countries. Data shows that one veterinarian should look after more than 20,000 livestock heads, 35,000 poultry birds and 500 pets which is very high compared to the other neighboring country. Small number of veterinarians cannot attend the farms personally for effective services. In Nepal there are about 8500 para-vets (JT/JTA) and they serve to a great extent in the country but the quality of veterinary services may not be same as of veterinarians. So, scope of veterinarian and veterinary services are very high in Nepal.

#### **History and present status**

In Nepal history of veterinary education is very short compared to neighboring south Asian countries. Institute of Agriculture and Animal Sciences (IAAS), Rampur under Tribhuban University (TU) is the first institution where 4 years B Sc Animal Science course has been started in 1987. But just after the graduation of first batch of B Sc An. Sc., institute has decided to condense and convert this course into B V Sc and AH degree in 1993 by addition of clinical courses for extra 2 ½ years period. The university undergraduate degree course in Nepal is B V Sc and A H (Bachelor of Veterinary Sciences and Animal Husbandry). After 1993 IAAS has enrolled students directly in B V Sc and A H program and the program is now shifted in Paklihawa campus in Rupandehi district afte Nepal government decision to establish Agriculture and Forestry University (AFU) in Rampur. Under AFU, faculty of animal sciences, veterinary

sciences and fisherie (FAVF) has started B V Sc and AH program since 2012 in the existing facilities of IAAS Rampur campus.

Besides above government institutions there are other two private colleges: Himalayan College of Agricultural Sciences and Technology (HICAST) and Nepal Polytechnic Institute (NPI) who conduct B V Sc and A H program under the affiliation of Purbanchal University. Every year 196 students are enrolled in the program in existing four institutions and the duration of the course is of 5 years (semester system) including 6 months internship. Detail about the program is presented in table 1.

Table 1. Present status of veterinary institution in Nepal

SN	Institution	University	B V Sc start year	Students per year	Remarks
1	IAAS, Paklihawa,	TU	1993	50	Government
	Rupandehi				
2	HICAST, Kritipur,	PU	2001	48	Private
	Kathmandu				
3	NPI, Bharatpur,	PU	2010	48	Private
	Chitwan				
4	FAVF, Rampur,	AFU	2012	50	Government
	Chitwan				
Total students enrolled per year			r	196 students	

### **Nepal Polytechnic Institute**

Nepal Polytechnic Institute (NPI) is a private educational institution affiliated to Council for Technical Education and Vocational Training (CTEVT) and Purbanchal University (PU) of Nepal.

The institute has been established in 1996(2052 BS) with the aim to train and produce lower, intermediate and higher-level technical manpower in the field of livestock production, veterinary sciences, and engineering and human health sciences. It also provides consultancy services on above field.

The institute's main campus is located in Bharatpur Metropolitan City (BMC) of Chitwan district about 150 km south west of capital city Kathmandu. Bharatpur is the second largest metropolitan city of Nepal in Bagmati province extended from the foot hill of Mahabharat range to the plain of inner terai. The NPI main campus is centrally located and accessible from all parts of the country. East west national highway passes through the city and hence connected by all season roads and air services.

Sauraha of Chitwan National Park, Devghat Dham, Manakamana Temple, Shaswat Dham Nawalpur, Narayani River, Uperdang Gadi, Bishahari Tal etc are some of the popular tourist destinations for internal and foreign visitors. Students from different parts of the country can get benefit to visit such popular places during their course of study for entertainment and educational purposes.

At the beginning time institute started some TSLC level/ pre-diploma courses such as Livestock JTA, Civil Suboverseer, CMA, ANM and Lab Assistant. These all courses were 15 months post SLC. After 2000 (2057 BS) post SLC 3 years diploma courses such Diploma in Civil engineering and Diploma Agriculture have been started under the affiliation of CTEVT.

NPI has started PU affiliate degree courses such as B V Sc and A H, B Sc (Hons) Ag, B E civil and B Sc Nursing since 2010 onwards. These courses are now running in 4 different places within Bharatpur Metropolitan City under the faculty of Agriculture and Veterinary Sciences, Engineering and Health Sciences.

Regarding B V Sc and AH program, NPI has started this course since 2010 with enrollment quota of 48 students per year. The institute possesses state of the art facilities of class room buildings, laboratories, veterinary teaching hospital with ambulatory vet services and instructional livestock farm complex. Till date 528 students have been admitted and 253 students have graduated up to 9<sup>th</sup> batch and other 10<sup>th</sup> batch to 14<sup>th</sup> batch students which count 275 in number are recently studying in B V Sc and A H in different semesters including mandatory internship.

The institute aims to be a top ranked veterinary and agriculture institutions in Nepal.

### **Nepal Veterinary Council**

Nepal Veterinary Council NVC) has been established in 1998 as a national veterinary statutory body through the promulgation of the Nepal Veterinary Council Act, 1998 (2055BS). It is the highest authority and veterinary statutory body in Nepal, established by law. The NVC is the independent governmental organization responsible for improving animal health services nationwide and ensuring the quality of human resources involved in veterinary services.

NVC conducts veterinary licensure examination and issues NVC registration certificate for the successful candidate after B V Sc or equivalent degree. NVC keeps up to date records of all registered veterinarian such as basic degree holder and specialized in particular field with experience. The NVC maintains functional relationships with concerned national and international organizations.

NVC formulates and implements code of conduct for veterinarian involved in veterinary profession in Nepal. NVC is the authorized government agency which advocate the government ministries, local bodies and departments for the formulation of policies, act, rules, regulations, and standards related to livestock production, animal health and veterinary services as such. It also formulates guideline for veterinary practices, set up standard to establish veterinary institutions, veterinary clinics/ hospital; veterinary certification procedure at the time of national and international trade and transportation of live animals and animal products. So, NVC has significant role for improving the quality of animal health services through quality human resources involved in veterinary services and ultimately for the improvement of livestock economy and public health issues in Nepal.

# Future prospect and job scope of veterinary graduates in Nepal

Veterinarians have a large number of avenues of work and the demand for veterinary doctors has increased greatly. Veterinarians can work in the government job in local bodies and department of livestock services, poultry farms, dairy farms, sheep and rabbit farms, stud farms, private and government veterinary hospitals and clinics. Wildlife sanctuaries and zoological parks as well as aviaries need veterinarians. The army forces also employ veterinarians for the management and care and treatment of their regiments which have horses, mules, and dogs. Private practice is

another option they can consider. There is increased number of commercial dairy cattle and buffalo farm, sheep and goat farm, piggery and poultry farms run by government and private sector. They directly recruit veterinarians for day-by-day vet services. Poultry hatcheries and feed industries have compulsion to recruit or hire consultant vets in order to run their business.

Teaching in universities and colleges is another option for vets as a professor/ instructor in various institutions to train the students in the field. For presently running 4 veterinary institutions, who conduct B V Sc and AH program have nearly 100 post laying vacant for veterinarians to teach undergraduate B V Sc students and for graduate vet programs as a professor/ instructor in different veterinary related departments. There are nearly 150 CTVT affiliate schools and colleges in Nepal who run livestock JTA and Diploma in Animal Science courses. They absorb and recruit substantial numbers of vets to teach and train the students in the programs. So, we can roughly estimate that there is immediate demand of about 300 fresh veterinary graduates for immediate employment in educational sector only.

There is growing trend of establishing pet clinics in city areas such as in Kathmandu, Bharatpur (Chitwan), Dharan, Biratnagar, Butwan, Nepalgungj, Pokhara and even other towns in district headquarters and many veterinarians are engaged in pet (dog and cat) practice.

Besides regular practice, vets can also take up research work, either on their own educational institution, NGOs or in association with the government such as NARC.

Pharmaceutical industries appoint veterinarian for the research and development of drugs, chemicals and biological products particularly antibiotics and vaccines both for human and animal use. They can also work in technical sales, agribusiness and marketing, pet food manufacturing industries and in management of industries dealing with animal feed, animal products, milk and meat products processing industries.

There are 753 local bodies (6 metropolitan cities, 11 sub-metropolitan city, 276 municipalities and 460 rural municipalities) in Nepal (UN digital library Nepal 2024). Government has announced one veterinary doctor one Palika policy. But more than 90 % veterinarians are concentrated in Kathmandu valley and other city areas like Biratnagar, Chitwan, Butwal, Nepalgunj, Dhangadi, Pokhara etc. Most of the rural municipalities and many municipalities have no veterinarians

working in service and there are many vacant posts of veterinarians. So, one can estimate that there is an immediate need of at least 500 veterinarians within a year or two for government sector only in order to deliver proper services in the areas where substantial number of livestock heads are kept.

### Conclusion

Nepal has great contribution of livestock economy in national GDP. Veterinarians are the principal human resources for the driving of the livestock sector properly. They provide managerial and health services in order to get more benefit from the sector. In Nepal, there are only 4 educational institutions who are conducting basic veterinary education, B V sc and A H degree courses. The numbers of graduates passing out from these institutions are very low compared to the present national demand.

There is huge problem of brain drain in Nepal for last 8-10 years. As of other fields, every year many young veterinarians are going to the foreign countries in the name of study abroad. There is little chance of their coming back after study rather they settle there permanently.

Veterinarian have large avenue of their working areas in Nepal and abroad. But the Nepal government's present pay scales are very low compared to other SAARC countries. They are not satisfied to live and work in own country rather they try to go to the foreign countries for better life. This is the great challenge for the country but the opportunity for the employment prospect of fresh graduates.

From the above scenario we can conclude that the future prospect of veterinary education and veterinarian is very good in Nepal in terms of employment opportunity but the government has to think over how to retain such human recourses for the sustainability of the livestock sector in Nepal.

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