Project for Improvement of Institutional Capacity for Foot-&-Mouth Disease Control in Myanmar

LBVD-JICA Bulletin



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PREFACE

Dear Stakeholders Mingalarbar!



The Project is here to assist LBVD to mitigate a gap between her missions expected by the society and her capacity to achieve them. LBVD urgently faces and to purture young administrators and professionals

great demand to nurture young administrators and professionals for sustainable contribution in livestock sector. This Project has been inviting experts from Japan for laboratories and the fields. We expect LBVD staff who have been working with us will grow as leaders to substitute for these Japanese experts disseminating important ideas and skills to improve LBVD capacity as early as possible. For similar reasons, the project hopes to send only those who have high communication skills to transfer what they learned in Japan to their colleagues after returning to this country. Young officers, get ready to develop your leadership skills and vision!! Dr. Kanameda M. Chief Advisor



Young and motivated officers now on training by the JICA project to be future trainers. Livestock sector in Myanmar is rapidly growing and urgently requesting LBVD for advanced veterinary services ..

Questionnaire surveys have been conducted for collecting more detailed information from village leaders of the townships



Pilot Sites Selected for Project

Beside mass-production of effective FMD vaccines in Yangon, this project sets focal points to establish a disease control model in Mandalay Region. Seven targeted townships were revealed to host seasonal migratory cattle herds which might spread animal diseases along the movement. The project also focuses on Pyin Oo Lwin as a model of FMD buffer zone between Mandalay and far north of Shan.

For appropriate use of FMD vaccines, farmers' awareness in the pilot townships and networking of related people in the field are essential. This is strongly connected to other project activities including capacity building of diagnostic labs, improvement of outbreak reporting & monitoring system, and virus isolation and characterization to establish vaccine virus library.

Pilot Training for Vets/CAHWs

In search for the most effective way to offer livestock extension services and to establish improved communication among LBVD, animal health workers (CAHWs) and livestock small-holders, the project organized 7-day practical training course on diagnosis and handling of cattle disorders. The first trial course was held in Tada-U tsp from 12th to 20th Dec. 2019 with 18 participants including 7 LBVD officers from 4 adjacent townships and 11 CAHWs from Tada-U. They all applauded the instruction of Dr. Minami Shigeru and showed motivations for more training of this sort, for example, the use of stethoscope and thermometer for routine clinical diagnosis and on-site practice in their villages.

Based on the review of this trial, the project will plan courses with improved contents and teaching materials in selected townships in Mandalay region.



Dr. Minami and his instructor team, pose with the participants of pilot training course, 20 Dec. 2019.

Upgrading Lab Capacity at MVDL

The improved command of laboratory diagnosis is the key to disease control, this is the reason why MVDL is one of the project areas. Dr. Sato Mitsuo, JICA expert, describes in his report to LBVD that MVDL should be further capacitated for comprehensive diagnosis of livestock diseases. He assists to initiate cell culture techniques for isolation of viruses, which would make it possible to detect infectivity and pathogenicity of viruses. However, it is easy to be said but harder to be done. He faces a lot of difficulties under conventional Myanmar environment to subculture the cell-line delivered from Japan. The technique requires very sensitive hands-on and reagents as well as quality water, which would be innovation to Myanmar science.



Dr. Sato assists MVDL staff for introduction of cell culture methods, which will enable it to isolate pathogenic viruses from diagnostic samples.

'PICA' Resulted in Hardware Disease (Traumatic Pericarditis)

Cattle have an appetite for substances that are largely non-nutritive, such as hair, paper, paint, feces, ropes, metal... This abnormal appetite is called **pica**. What will happen if cattle eat sharp metal? The following is what we experienced in Ye Khar village of Tada-U township.

A 7-year old ox was presented with anorexia and increased salivation then administered with antibiotics and a non-steroidal anti-inflammatory drug for 7 days by a CAHW. After a while, the animal started showing ataxia/lameness and seemed like hesitating to walk although the soles and interdigital claws were normal. It also had tachycardia (112/min), anorexia got worse, and salivation continued without any obvious lesion on the tongue or oral mucosa.

Animal Health & Economics Visitors to the Project

A group of Japanese economists and veterinary epidemiologists were here in Sep. 2019 and Mar. 2020 for a study of the relationship between farmers' sociological factors and prevalence of a neglected zoonosis in Mandalay.

They are Prof Kohno H. and Dr. Kubota S. of Obihiro University and Prof Makita K. and Dr. Ukita M. of Rakuno University, accompanied by young officers from LBVD HQs. Animal Health Economics is a new area of study which can be a powerful tool in animal disease control because it can change farmers' and stakeholders' behaviors which facilitates disease transmission.



Staff of MVDL brief their activities to the Japanese survey team.

Blood samples were submitted for laboratory tests at MVDL, which revealed hyperproteinemia (14.0g/dl) with increased gamma globulin (49.8%) and neutrophilia (WBC 8,700/ μ l, neutrophil=60%), indicating chronic purulent inflammation. In the morning three days after the animal couldn't stand up

any longer, the animal died. At the postmortem, the animal was finally diagnosed a traumatic pericarditis caused by a metallic wire of about 9 cm penetrating the pericardial sac (a similar photo on right) and the liver.



From Braun U, et al. (2007) Vet. Rec. 161, 558-563.

JCC Meeting of Project

The first meeting of Joint Coordination Committee was organized at Mingalar Thiri Hotel, Nay Pyi Taw, Jan. 14, 2020, chaired by Dr. Ye Tun Win, Director General as well as Project Director. The progress of the first 6 months of project activities was presented by Dr. Kanameda, followed by questions and comments by the participants.

The meeting is to be organized every 6 months to monitor the activities and to make plans ahead.



EDITOR'S POSTSCRIPT

Due to the COVID-19 pandemic, the project's planning has to face several changes at the end/start of Japanese fiscal year. Even though, the project might have had its very smooth kick-off. We will conclude the findings in base-line surveys before entering the second year and start further field activities.

One thing I would like to share is our project logo, which I hope to see in many occasions in the project areas. Contact: 09259135689 (Myanmar)



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