

THE YAK-MOVING TREASURE OF HIGH HIMALAYAS



Yak farming is critical for the livelihoods of poor rural nomads in the cold northern areas of Nepal. However, this sector is yet to get the attention it deserves, argues Krishna Acharya

INTRODUCTION

The Himalayan highlands of Nepal are a unique ecosystem. Hardy tribes and various sturdy animal species reside in the harsh terrains that have scanty vegetation. In many places, the land is covered by snow for two-thirds of a year. However, settlements dot the landscape below the tree lines. The people of the high Himalayan region have been rearing animals from time immemorial. The rugged topography, poor precipitation and poor soils make it unfavourable for growing crops. Thus, nomadic pastoralism is critically important for the economy of Mustang District. This makes the yak that can thrive in the arid and cold climate with its poor vegetation a boon for the Himalayan people. They thrive amid the harsh climatic conditions of the high Himalayas with no feed supplementation. Almost every nomad who lives in alpine areas, far away from villages with yaks and chauri, relies solely on the herbal and traditional practices such as shamanic rituals, chants and blessed water as medicine (Acharya *et al* 2014, Acharya and Kaphle 2015).



Herd of Yak –Bhirkuna lek of Lete, Mustang, Nepal

PRESENT SITUATION

Yaks have got special place in the livelihood and economy of Himali people commonly called 'Bhote' and 'Sherpa'. They are the main source of household incomes in the upper slopes of mountain districts of Nepal under the transhuman migratory system (Joshi 1982, Pande 2004). They are a good source of meat and milk. Wool, horns, hide and skin, are the main by-products.

These livestock products have substantial role on household food security of the highland nomadic communities (Acharya 2015). However, the herders are abandoning the yak and chauri farming and are shifting towards other businesses due to lack of adequate pastures, hardship, decreased production and poor animal health services (Pande 2004). The new generation or the youth do not want to be involved in this occupation. They rather prefer other options such as tourism and migration to Middle East or to major cities of Nepal or India (Pande 2007).

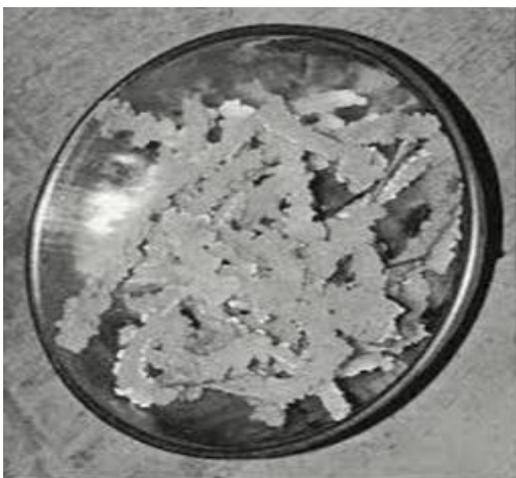


Yak herder with his yak and author

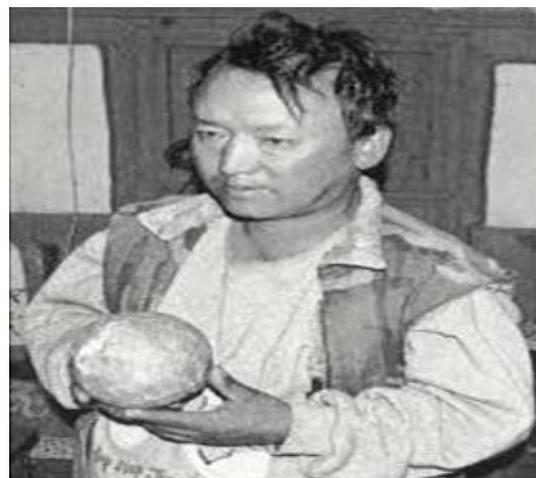
MARKETING AND VALUE CHAIN

Regarding the value chain of yak husbandry, the yak herders of Mustang District consume substantial portion of their products. The products mainly meat, milk or butter are consumed either by producers themselves or are shared with relatives living in other districts and overseas. Only the excess of livestock and their products enter the market chain. Marketing of live animals rather than their products at the production points predominates. In lower Mustang, about 200-300 adult yaks are slaughtered annually which is shared by the local communities.

The Yak Farmers Association in Mustang determines the allocation of land for the yak herders. It allows the use of land above the farmer's home at no cost, but association charges some levies when the herders have to use the land of other villages (Degen et al 2007). The live animals are directly sold by the producers without involvement of middleman in this region. Usually yaks above 10 years old are directly sold to those engaged in slaughtering and distribution of yak meat. The animals are slaughtered by traditional method without any regard for food safety.



Chhurpi (Dried cheese) made from Yak milk (Source- Degen et al 2007)



A man with Ghee made form yak milk (Source- Degen et al 2007)

In some areas such as Rasuwa and Dolakha, milk from chauri (Yak-cattle hybrids) during Baisakh (April/May) to Kartik (Oct/Nov) is purchased by Cheese Production Centers for cheese and butter production (Pande 2007, Chhetriet. al 2011). Out of the 28 yak rearing districts, five districts, namely Solukhumbu, Dolkha, Rasuwa, Sindhupalchok and Ramechhap, have cheese factories which produce yak cheese. Most of the Chhurpi (dried cheese) produced is sold to the traders, who visit the herds regularly and export to Kathmandu and India. Ghee produced in the areas are either consumed locally or sold to the traders who export these to the Tibet (Pande 2004).



Yak tail (Chammar) which is sold at premium price

The herders are only the price takers with no bargaining power who sell their products directly to the traders (negotiators). Thus herders have weak link in the marketing chain. There is a traditional blood drinking ceremony twice a year. In April–May, ceremony takes place at Sekong Lake, Kowang and in Shrawan at Marche (near tukuche) and Mulee (near Kowang). Scores of people gather at the Sekom Lake, Marcheelek, and Mulilek to participate in a blood drinking ceremony. The blood of the yak is supposed to cure gastritis, malaria, purify the blood and enhance sexual vigour.

Yak wool is shorn once a year in June/July and is used to make clothes such as Bakkhu, Docha. Wool obtained from sub adult and adult yak that has poor market value is used to make ropes, tents and carpets (Pande 2007). Wool from the calves of fine quality is used to make warm clothes for humans.

Government and non-government sector namely High Mountain Agribusiness and Livelihood Improvement Project (HIMALI), Department of Livestock Service (DLS), United States Agency for International Development (USAID), and Food and Agriculture Organization (FAO) have made some efforts to promote yak breeding. Project for Agriculture Commercialization and Trade (PACT) and Department of Livestock Service (DLS) involved in extension and Dairy Development Corporation (DDC) are involved in marketing of yak cheese. But, initiatives to add value to products such as wool scouring, milk pasteurization have not been taken seriously here in Nepal. Neither the government nor the NGOs are involved in imparting knowledge to yak herders. As farmers follow the subsistence way of farming, a strong professional extension service is required to transform subsistence farming to market oriented production.



Mat made from Yak hide with wool

PROBLEMS AND CHALLENGES OF YAK FARMING IN NEPAL

Despite their great potentiality, yak farming in Nepal is currently facing different problems and challenges. These are as follows:

- Lack of encouragement and motivation to the nomads of remote areas
- Inadequacy of forage and nutrients during the lean period
- Inbreeding depression, inefficient selection of animals
- Climate change and increased incidence of pests and diseases such as Helminthes, myasis, and FMD (Acharya *et al*, 2014, Shrestha and Prajapati M 2015).
- Closure of Tibetan alpine pastures to Nepalese herds
- Low level of research funding available to address the issues of Yak farming
- Majority of yak herders are illiterate and cannot perform efficiently, scientific observation, record keeping and interpret results.
- Another major obstacle is the lack of Artificial Insemination service.
- Absence of veterinary and animal health service to the nomads due to the reluctance of technicians to visit herds
- Lack of co- ordination among government and other concerned stakeholders.

Box 1: Organizations involved in Development of Yak Farming in Nepal

Yak Development farm, Syangboche:

This farm was established in 1973 with the introduction of 40 Yaks/Naks from Tibet. Since then the farm produces and distributes 13 breeding animals to the farmers, but the supply is still inadequate. The farmers currently purchase extra stock from Tibet. Apart from this, Yak development farm, Syangboche, Ministry of Agriculture and Co-operatives (MOAC) is working as per their annual programmes for yak development in different districts. Unlike the National Research Center (NRC) on yak In India, research on various aspects of yak husbandry has not taken any momentum in Nepal.

High Mountain Agribusiness and Livelihood Improvement Project (HIMALI):

HIMALI is an agribusiness development project being implemented by Department of Livestock Service (DLS) in 10 mountain districts of Nepal. It aims at agribusiness development, strengthening livestock farms and centres and also value chain development. Currently, in order to strengthen the yak development program in Nepal, HIMALI Project purchased 45 yaks/Naks from Tibetan Autonomous region and handed over to the Yak development farm, Syangboche.

Strengthening extension to promote better use of yak

There is an urgent need to strengthen extension services to support Yak farming. Extension should support farmers in the following aspects:

- Establishment and promotion of commercial farming at each pocket area of the district
- Formation of yak user groups @ 10-20 farmers per group
- Distribution of breeding bull to each of the groups
- Training yak farmers in modern methods of Yak husbandry

Apart from these, drenching and vaccination programmes for the disease surveillance and monitoring of diseases; formulation and development of policies for economic uplift of the yak herders and establishment of the breeders farm at the regional level (Humla, Jumla, Mustang, and Solukhumbu) are also important.



Sujan Gurung, Yak herder of Kowang who has been rearing yak for 10 years, complained of no support from the government in yak farming. He is following the traditional way of husbandry, which he perceives as partially efficient. Their traditional way of ethno veterinary practices cures most of the diseases with no cost medicines that are collected from their own pastures (Acharya et al, 2014, Acharya and Kaphle 2015). Their indigenous knowledge of husbandry has to be evaluated and strengthened by modern scientific husbandry systems. Sujan perceived the increased incidence of parasitic diseases such as ticks and myiasis in summer pastures and death from extreme cold in winter pastures as compared to the previous year.

Resource constraints for agricultural research

Declining resource allocation for agricultural research and extension is having direct implication on attaining the objective of poverty reduction and food security. The challenge for Nepal Agriculture Research Council (NARC) and Department of Livestock Service (DLS) is to produce as many relevant research outputs to meet the changing needs of Nepalese farmers under increasing resource constraints.

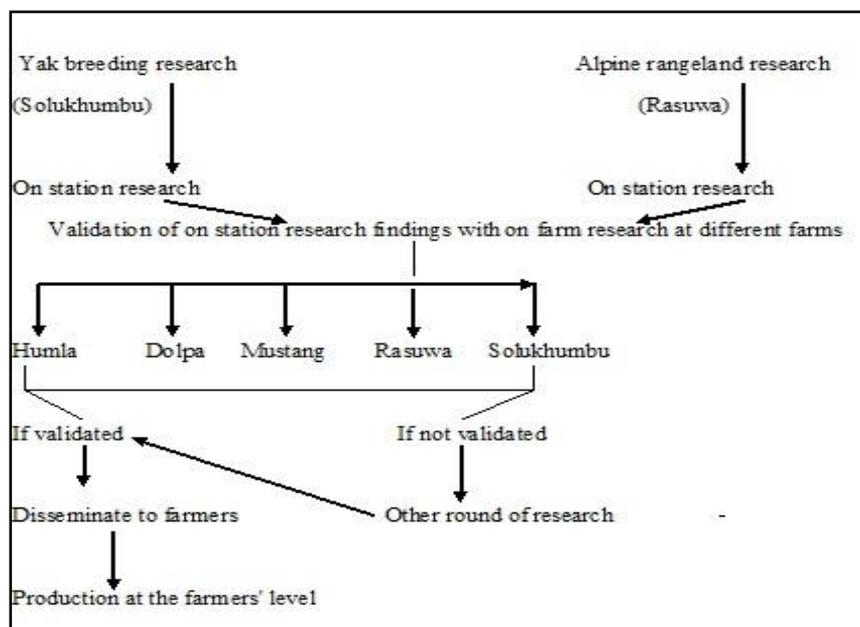


Fig 1: Recommended research plan for promotion of yak husbandry in Nepal

RECOMMENDATIONS

One of the major priorities for development of Yak farming is development of an organized and transparent value chain with all those involved in yak farming, processing and export of yak products and by-products. The following are needed to implement this priority:

- Rangeland and pastureland restoration programmes
- Provision of shelter during the winter months and appropriate feeding, heeding and weeding systems
- Development of niche markets for Yak products both national and internationally
- Well-equipped yak research should be established to develop nucleus herd and replacement stocks along with the other aspects of yak farming



3 days old calf with mother

- On farm research on feeding breeding, healthcare, rangeland management and marketing structures in the perspective of Nepalese Himalayas and has to be promoted by strong extension services
- Strong extension services to the farmers for better animal husbandry
- Provision of subsidies to the Yak herders and insurance of Yaks
- Routine vaccination and effective disease management/treatment program.

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Krishna Prasad Acharya is Animal Science Instructor at Shree Himganga Higher Secondary School, Sanghutar, Ramechhap, Nepal; Institute of Agriculture and Animal Sciences (IAAS), Tribhuvan University (TU), Nepal. (kriaasedu@gmail.com).

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