# CHANGING LIVELIHOOD OF SHEEP-GOAT REARERS IN THE STATE OF HIMACHAL PRADESH

#### **CATEGORY:**

Animal husbandry-adoption of modern and innovative practices of dipping & drenching by migratory shepherds

### **CHALLENGES:**

Ecto-Endo parasitism in small ruminants pose a major challenge for breeders of Himachal Pradesh owing to high rainfall 2900 -3800 mm coupled with grazing of livestock in catchment areas of dams and reservoirs. The conventional civil /masonry type structures of sheep dips have various limitations; very high cost of maintenance, suitable land and adequate water source is also not available at required locations along the migratory routes of shepherds, its cleanliness and upkeep, waste disposal and effectiveness in treatment coupled with very high cost of dipping were other major impediments to overcome so as to provide dipping facilities to the small ruminants. In Himachal Pradesh sheep and goats are reared together traditionally by tribes who migrate with their flocks in search of grass from alpine pastures during summers to the low-lying areas /plains of the state during winters. They traverse through the length and breadth of the state criss-crossing mountain passes, glaciers and rivers, they virtually face the fury of weather throughout the year. Their migratory routes both during upwards and downwards migration are almost the same and it is here that the inputs particularly the prophylactic Ecto and Endo parasitic management, vaccination and other veterinary aid is eventually needed and is targeted under the project.

#### **INITIATIVE:**

The concept of mobile sheep dips was introduced under RKVY projects keeping in view its advantages. The mobile sheep dips (jet spray type) is an easy to transport, assemble machine in which sheep /goats arrives from a lead up system from the portable holding yard to the machine where a solenoid eye/sensors sets up the pump and sprays the chemical mixture (Approx. 2 Ltrs) through jets that are strategically located to cover whole of the body of the sheep. The sides and top adjustable bars handle small and large sheep/goats (horned). The sensors are capable to detect black/coloured sheep and goats. The machine can be transported in a pick-up/jeep and assembled at the suitable sites where reasonably flat surface is available. Unlike plunge /tank type dipping, this technique requires small amount of chemical solution (2 Ltrs/sheep-goat) hence reducing the cost of dipping considerably, moreover, fresh chemical is applied to each and every animal unlike plunge type where after dipping of some animals the water gets muddy and the usage of chemical solution is 10 folds as compared to this modern technique and so is the problem with the disposal of the used water. Since the animals are first driven towards the holding yards, other prophylactic sheep management practices are also taken care of like vaccination and drenching by the technical staff of the Animal Husbandry Department. Sheep shearing facilities are also being provided near the vicinity of the Mobile Sheep Dips. Off late sheep shearing has become a major challenge for the sheep breeders due to non-availability of traditional shearers, time consuming process of hand shear. The mechanical sheep shearing facility is being provided by the Federation through trained private sheep shearers who are engaged on piece meal basis, the imported shearing machines and its accessories are being provided to them which have been sourced through different projects including RKVY.

#### **KEY RESULT/INSIGHT/INTERESTING FACT:**

The typical migratory nature of the flocks makes it very difficult for the breeders to get accessibility to veterinary services due to their far flung/remote locations. It was only during epidemic/ outbreaks that the breeders could manage to rope in veterinary services to their flocks but by that time they had to pay a heavy price due to mortality and morbidity in flocks. As a result of this innovative method of providing dipping, drenching and vaccination facilities by the Animal Husbandry Dept. at a common place disease outbreak have been considerably reduced besides increasing the overall productivity of the animals thereby directly benefitting the farmers. More and more sheep breeders are being enthused towards getting these facilities year after year which are being provided along their migratory routes both during upwards migration (April-May) and downwards migration (September-October). Besides veterinary services mechanical sheep shearing facilities are also being provided by the H.P. Wool Federation in the vicinity of the Mobile Sheep Dips.

### **IMPACT:**

Ecto and Endo parasitism control is the major challenge of the project. Mobile sheep dipping, drenching and vaccination facilities are imperative not only for better overall growth of animal, but also to check the mortality and morbidity rate in the small ruminants. The project is helping in raising the awareness levels of farmers towards better sheep management. The importance of prophylactic interventions at least twice a year is very beneficial for recording an increase in overall production of animal i.e. meat, milk etc. by 5-10% besides considerable decrease mortality and morbidity rates. Gradually the breeders have begun to realize the importance of dipping and drenching and the camps being organized along their migratory routes are proving beneficial to them. The traditional practices of the breeders to give deworming medicines with salt results in over/under dosing; this practice is fast changing with the

introduction of drenching guns. More and more breeders are adopting the scientific methods as a result of this intervention. Similarly, castration by open and cut method practiced for years is fast changing as the breeders are using the castrators for castration of their male lambs/ male kids for gaining weight before sale.

## **LESSONS LEARNED:**

Major challenge is the customization of breeders in using the modern/ scientific tools which are not only scientifically proven and effective but are also time saving and animal friendly. Slowly season after season more and more breeders are using these facilities seeing/ observing their benefits.

Since the machinery is costly and once installed at a place, its safety and security has to be taken care off. In the project itself camping facilities are being provided to the field staff so that they can camp at site. The staff have been motivated for this purpose. The machine is shifted from one place to another after completion of work at one place in a MUV/Jeep. Expenses relating to its transportation, minor site development charges, minor repair and maintenance is in-built in the project.

The migration of flocks is a regular feature and the migratory routes are identified, hence in order to provide the dipping, drenching and vaccination facilities besides sheep shearing under common roof, it is pertinent that these interventions be made a regular feature and also made mandatory to cover all the migratory flocks throughout the state at least twice a year. This will go a long way in providing better health services to the migratory flocks of sheep and goats that under normal circumstances are deprived of such interventions. Issuing of Health cards is also imperative so as to avoid duplicity of inputs since the breeders migrate long distances and traverse various districts in between.

# **SUPPORTING QUOTES AND IMAGES:**

i) Sheep Dipping-Drenching in progress 'Autumn season 2017' –
 Venue:Ridkmar (Shahpur, Dist. Kangra) under Veterinary Hospital, Drini, Tehsil Shahpur, Dist. Kangra, H.P.



ii) Sheep Dipping-Drenching in progress 'Autumn season 2017'-Venue: SherLohar (Dehra, Dist. Kangra)





- "The 'Electrodip' is less time consuming, more efficient, very eco-friendly and safe for even kids and requisite amount of chemicals is applied to each sheep, we want the machine to be installed in every season" said ShJigiri Ram S/o Sh Bulla Ram, Village & P.O. Greema, Tehsil Bharmour Dist. Chamba having a flock strength of 600 sheep and goats.
- iv) "The 'Electrodip' has one big advantage that any infectious and contagious diseases in the flock cannot be transferred to another which was not possible in the case of primitive dipping method, further there was a lot of wastage of chemical and was not at all environment friendly" said ShArjun Singh S/o ShChokas Ram, Village & P.O. Greema, Tehsil Bharmour Dist. Chamba having a flock of 700 sheep and ShChanu Ram S/o Mangal Ram, V.P.O Kugti, Tehsil Bharmour Dist. Chamba having 100 odd sheep and goats in the Mobile Sheep Dip (Jet spry type) installed at Village Ridkmar in the Autumn downwards migration of 2017".

## **ADDITIONAL INFORMATION:**

# 1. List of all project partners and/or donors who supported work:

- Dr Ajmer Singh Dogra, Deputy Director (Animal Health/Breeding), Kangra,
  Dist. Kangra, H.P.
- ii) DrMohinderShama, Assistant Director, Extension, O/o Deputy Director (Animal Health/Breeding) Kangra at Dharamshala, Dist. Kangra, H.P.
- iii) DrSeemaGuleria, Sr.Vety Officer, SDVety Hospital Dehra, Tehsil Dehra, Dist. Kangra, H.P.
- iv) DrAbhishek Hans, Vety Officer, Vety Hospital Drini, Tehsil Shahpur, Dist. Kangra, H.P.

# 2. Links of all supporting material, such as news items, photos on flicker and presentations on slide share

- Punjab Kesri, Kangra, 05.01.2018 (Attached below)



3. Contact person for this story (name, position, email address:

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