IN THE HIGH COURT OF SIKKIM: GANGTOK

(Civil Extra Ordinary Jurisdiction)

W.P. (PIL) No. 08 of 2019

In Re: 300 Yaks Starve to Death in North Sikkim

Vs.

- 1. State of Sikkim, Through the Chief Secretary, Government of Sikkim, Gangtok, East Sikkim.
- 2. The Secretary, Department of Animal Husbandry Livestock, Fisheries & Veterinary Services, Government of Sikkim, Krishi Bhawan, Tadong, East Sikkim.
- 3. The District Magistrate, District Administrative Centre, Government of Sikkim, Mangan, North Sikkim.
- 4. The Sub-Divisional Magistrate, District Administrative Centre, Government of Sikkim, Chungthang, North Sikkim. ... RESPONDENTS.

BEFORE

HON'BLE MR. JUSTICE ARUP KUMAR GOSWAMI, CJ. HON'BLE MR. JUSTICE BHASKAR RAJ PRADHAN, J.

Mr. Jorgay Namka and Ms. Tashi Doma Sherpa,

Advocates as Amici Curiae.

For the respondents: Dr. Doma T. Bhutia, Additional Advocate General,

> Mr. Thinlay Dorjee Bhutia, Government Advocate, Mr. Thupden Youngda, Government Advocate, Mr. S. K. Chettri, Assistant Government Advocate, Mrs. Pollin Rai, Assistant Government Advocate.

Date of hearing 13-11-2019.

Date of judgment 26-11-2019.

<u>JUDGMENT</u>

Arup Kumar Goswami, CJ.

The 12th May, 2019 publications of The Hindu, Himalayan Mirror, Sikkim Express, हाम्रो प्रजाशक्ति (Humro Prajashakti), Summit Times and The Telegraph, all daily newspapers, reported death of around 300 yaks due to starvation. It is necessary, at the very outset, to take note of the headlines:

Summit Times - "Around 300 yaks starve to death in North Sikkim"

Himalayan Mirror - "300 yaks starve to death in North Sikkim"

Sikkim Express – "Unrelenting snowfall trap yaks since December, scores found starved to death in North Sikkim"

The Telegraph - "300 STARVE TO DEATH IN SIKKIM SINCE DECEMBER.

Melting snow bares yak tragedy"

Humro Prajashakti – "भारि हिमपातको कारण लगभग तीन सय चौंरीको मृत्य्"

(rough translated version)

Death of about 300 yaks because of heavy snowfall"

The Hindu – "300 Himalayan yaks starve to death in Sikkim"

2. The headlines noted above eloquently and poignantly encapsulated the enormity of the event due to which this Court considered it appropriate to take up the issue *suo-moto* on the judicial side and accordingly, this instant Public Interest Litigation (PIL) was registered on 10.06.2019.

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- 3. Mr. Jorgay Namka and Ms. Tashi Doma Sherpa, learned counsel practising in this Court, were requested to be Amici Curiae and they had readily consented to contribute to the proceedings. They have filed a report dated 19.10.2019 and also placed suggestions in the form of an affidavit dated 04.11.2019.
- 4. From the materials on record it is noticed that yak is a large member of the cattle family. They thrive at higher altitude and in cold weather and are prone to suffer from heat exhaustion above 15°C (59°F) as they have a thick layer of subcutaneous fat and as functional sweat glands are almost absent. Yaks consume the equivalent of 1% of its body weight daily and it crunches on ice or snow as a source of water. Lack of winter feed leads to heavy weight loss to the extent of 25% to 30% overall during that period, requiring recovery and weight gain during the summer months. According to the report of the Amici Curiae, yak population in the Indian Himalayan region, which is on the decline, is estimated to be over 76,000 and yak rearing states of India are Arunachal Pradesh, Sikkim, Uttar Pradesh, Himachal Pradesh and Union Territory of Jammu & Kashmir. Yaks can survive up to minus 40°C (- 40°C). Yak rearing is an eco-friendly livelihood for nomads who migrate to higher altitude during summer and return to lower altitude of about 3000 meters above mean sea level during winter. In Sikkim, yaks are now found only in Lachen and Lachung regions of North Sikkim, under two types of transhumance migration pattern. Yaks in Lachen region are generally of

Tibetan yak variety which normally stays away from human settlement and they move higher up towards colder region as winter sets in. There are about 7 to 9 families of herders each having about 100 to 150 yaks. The base of the herders of Lachen region is stated to be Thangu and while some of them move towards Muguthang region, some move towards Gurudongmar/Tso Lhamo region. LHO yak is predominantly found in Lachung region and they remain in contact with human settlement and it moves down from colder region during winter towards its base at Yakshey and Domang. There are about 8 to 10 families of herders each having 80 to 100 yaks of LHO yak variety.

- 5. Though the report of the Amici Curiae deals with certain other aspects like breeding, diseases and socio-economic causes for decline of yak population, having regard to the issue for which this PIL was registered, we are not dealing with those aspects of the matter in the present PIL. It is, however, noted that in the report dated 19.10.2019, the learned Amici Curiae mentioned that local population of North Sikkim depend to a huge extent on Army personnel stationed at different regions of North Sikkim and that the State Government should be in touch with the Army so that they can assist the local people and the administration in times of need.
- 6. In the report filed on 06.07.2019 by the Principal Director, Department of Department of Animal Husbandry Livestock, Fisheries & Veterinary Services (for short, A.H.L.F.&V.S.), Government of Sikkim, it is stated that in the month of February, 2019, verbal report of prolonged

and heavy snowfall was received from the local Pipon and herders who were residing in the valley of Lachung, Lachen, Muguthang and Phalung. Arrangements were made for averting feed and fodder shortage by distributing feed to the yak herders. Relief items consisting of chaffed hay/kutti and crushed maize/bhus were distributed to yak herders of Lachen and Lachung in the first week of March. However, road transportation to Muguthang was cut-off due to a thick blanket of snow, as a result of which, relief materials could not be delivered to the yak herders in those areas. The areas near about Muguthang and Lashyar Valley could be accessed only in the first week of May, 2019 and then only, the loss of yak lives came to light. The information was shared with the District Collector, North. Veterinary Officers and Paravets along with officials from B.A.C., Chungthang were deputed to provide necessary relief and treatment to the surviving weak and ailing animals and also to ascertain the actual loss. Annexure-R1 to the said report goes to show that a note was prepared by the Additional Director (North), Department of A.H.L.F.&V.S., indicating that local Pipons had reported, which was confirmed from the sub-divisional level officers and area field functionaries, that the nomadic herders as well as their animals were passing through a very stressful climatic condition without adequate feed and fodder, leaving both the livestock and the herders at the mercy of nature and that some young calves and few ailing animals had died due to starvation. The note proceeds to say that timely and requisite relief items in the form of feed, fodder and other essential items are to be

provided to the herders to see them through the crisis. It is also seen that by a letter dated 23.02.2019 issued by the District Collector, North to the Commanding Officer, 13 Battalion, ITBP, Lingdong, request was made for supply of 50 bags of Atta and 50 bags of Mustard oil cake to the yak herders. It was indicated in the said letter that it was reported to him that there had been unprecedented snowfall in the higher regions of North Sikkim and due to such heavy snowfall, the yak herders were unable to find fodder and grass for their yaks and as snowfall had been continuing for more than a month, lack of fodder had led to high mortality among the yaks. It was also indicated in the said letter that though fodder was procured by District Administration, as the road transportation had been cut-off due to the blanket of snow, the same could not be delivered to the yak herders. It is also indicated that one Sita Ram would be in touch with the Army stationed at Muguthang.

A report, which is not dated but which covers a period from January to April, 2019, prepared by the Additional Director (North), A.H.L.F&V.S. Department, was also enclosed wherein it is stated that there was a blanket cover of over 4 feet or 5 feet height of snow all over the available pasture lands and most of the herders decided to abandon their herd and they proceeded to the permanent habitats for safety, fearing depletion of their winter stock of ration, as a result of which the yaks were exposed to the wrath of nature. However, 5 members of nomadic herders stayed back despite inclement weather and they were

able to provide some care and assistance to the yaks with the aid of the Indian Army and I.T.B.P. personnel stationed in that area. As a result, lives of about 800 numbers of yaks had been saved. It is also stated in the said report that the team of Animal Husbandry Department could gain access to the area in the first week of May, 2019 and the report published in the social media, etc. regarding the death of yaks was based on the WhatsApp message forwarded by Additional Director (North), A.H.L.F&V.S. Department to the District Collector. The report dated 06.07.2019 also discloses that a total of 51 households had been affected and ex-gratia of Rs.45.90 lakh was payable to the affected households.

that construction of ITBP road from Lugnak-La to Muguthang was awarded to the successful tenderer at an amount of Rs.48,0037,185.24 (Rupees Forty Eight crore Thirty Seven thousand One hundred Eight Five and Paise Two Four) only by an order dated 07.06.2018 and the time of completion of 24 (Twenty Four) months would be reckoned from 22nd day from 07.06.2018. From the Annexure-R2 letter dated 10.11.2016 to the said affidavit, it is seen that notice to proceed with the work was issued to a Government Contractor for execution of work "RCR from NSH to Yak farm Denga and 2 other works Package 8/Phase XI in North Sikkim, amounting to Rs.1,175.93 lakh by Rural Management & Development Department, Government of Sikkim. Materials on record, however, do

not indicate if there is any progress in the construction of the roads, in question.

- 9. By an order dated 18.09.2019, this Court had directed the Staterespondents to inform the Court, by way of a report, the budget set aside for the welfare of the yaks and the steps taken by the Department for the yaks for the ensuing winter season. This Court also directed the Department to acquire readymade feed from the Indian Council of Agriculture Research (ICAR) - a National Research Centre (NRC) on Yak, Dirang, Arunachal Pradesh and to make available the same to all yak owners and herders. In view of it, a report dated 30.09.2019 was filed before this Court on 01.10.2019. However, this Court by an order dated 04.10.2019, observed that the report was grossly inadequate, and accordingly, the Government was directed to submit a detailed report as to how the yaks are going to be fed and sheltered during the winter and how medical assistance would be given to protect and prevent repetition of the tragedy of the death of 300 yaks last winter. This Court also noted that the breed of the yak and other considerations, which had been highlighted in the report, are irrelevant for the purpose in hand.
- 10. In the affidavit dated 01.10.2019 filed by the Chief Secretary to the Government of Sikkim, it is stated that an amount of Rs.26,09,000/-(Rupees Twenty Six lakh and Nine thousand) only had been kept aside in the financial year 2019-2020 for the welfare of yaks and that the said fund would be utilised for purchase of feed and fodder (complete feed block)

and also for purchase of ambulance, medicines & equipment, procurement of tents & other contingency expenditure. As an interim relief, a fund to the tune of Rs.18,10,000/- (Rupees Eighteen lakh and Ten thousand) only has been arranged, out of which Rs.9,20,000/- (Rupees Nine lakh and Twenty thousand) only is to be used for purchase of complete feed block for 20 MT and a sum of Rs.8,89,000/- (Rupees Eight lakh and Eighty Nine thousand) only is to be used for purchase of an ambulance. It is stated that the Planning and Development Department has committed to provide fund in the supplementary budget. Dealing with the steps taken by the Department for yaks for the ensuing winter season, it is stated that the Department of A.H.L.F&V.S., Government of Sikkim had organised an interactive meeting on 20.09.2019 with the concerned stakeholders, primarily, the yak herders, yak owners and Pipon of Lachen Dzumsa wherein they had been requested to make optimum use of the available infrastructures like Hay Godown and Yak Shelter. It is stated that 10 nos. of Hay Godown-cum-Yak Shelters at Lachung, Talam-Lachen, Denga-Lachen, Lachen, Samdong-Lachen, Rabum-Lachen, Yakthang-Lachen, Tsangtha-Lachen, Zeema Busty-Lachen and ongoing work at Byamzi-Lachen had been constructed and two Yak centres at Chopta and Zema in Lachen have also been established under the yak conservation programme. The ICAR - NRC on Yak, Dirang, Arunachal Pradesh, in collaboration with Department of A.H.L.F&V.S., Government of Sikkim on 27.09.2019 had distributed concentrated yak feed, complete feed block, chelated mineral mixture,

etc. to the yak herders. The ICAR was also requested to supply 20 MT ready-made complete feed blocks in order to mitigate the feed and fodder scarcity for the coming winter months and for this purpose budget provision has been kept. The Department of A.H.L.F&V.S., Government of Sikkim in collaboration with International Centre for Integrated Mountain Development and ICAR - NRC on Yak, Dirang, Arunachal Pradesh had undertaken periodical exposure tour of yak herders and they had been taken to Dirang - Arunachal Pradesh, Nepal, Bhutan and China to make them aware of scientific methods and good practices of yak rearing, management, feeding methods, prevention and treatment of diseases. While the construction of permanent shelters for the population of yaks was not considered to be practical and feasible, it is stated that for care and management of weak, pregnant, mulching and young yaks, the herders built semi-confined areas (Kraal) along their migration routes. It is further stated that having regard to large number of death of yaks that had occurred in the winter of this year, the Department was exploring the possibilities of constructing paddock and providing other essential items, such as tents, etc. Annexure-R1 of the said affidavit goes to show that the Managing Director, Sikkim Motors was requested to arrange to supply one number of Bolero Camper PS 4 WD for use as ambulance for welfare of yaks in North Sikkim by the Director (Piggery & Yak Development), Department of A.H.L.F&V.S., Government of Sikkim by letter dated 28.09.2019.

- 11. The Minutes of the Meeting with the local residents of Lachen and yak herders of Lachen on 20.09.2019 goes to show that fodder could not be carried to the pasture area where yaks were stranded during heavy snowfall. The yaks (Tibetan variety) were taken upwards anticipating that snowfall would be as usual each and every year, which was not so and because of such heavy snowfall, ground was not exposed for yaks to graze, as a result of which the animals had died of starvation.
- **12.** In the affidavit filed by the Chief Secretary on behalf of the respondent no. 1, the State of Sikkim, dated 19.10.2019, which was filed pursuant to the direction of this Court dated 04.10.2019, it is stated that as per latest survey and enumeration conducted by the A.H.L.F.&V.S., Government of Sikkim in the second week of October, 2019, there are 79 yak herding households under North District with a total yak population of 3230 numbers of which 1184 are male, 1585 are female and 461 are young calves. It is also indicated in Annexure-R2 of the said affidavit that there are six yak rearing zones in North Sikkim, which are -(1) Muguthang Valley (Lachen Dzumsa), (2) Lashyar Valley (Lachen Dzumsa), (3)Yumthang /Yumesamdong (Lachung Sebu/Domang (Lachung Dzumsa),(5)Chyakhung (Naga Forest) and (6) Tholung (Upper Dzongu). The maximum numbers of yak herding households are in Muguthang Valley with 48 nos., followed by Lashyar Valley with 30 nos. of yak herding households. Migration pattern of yak rearing in Muguthang Valley and Lashyar Valley is shown to be towards

higher altitude during winter. The migration of yaks in yak rearing zones such as Yumthang/Yumesamdong (Lachung Dzumsa), Sebu/Domang (Lachung Dzumsa), Chyakhung (Naga Forest) and Tholung (Upper Dzongu) is towards lower altitude during winter. The numbers of yak herding households in Yumthang/Yumesamdong (Lachung Dzumsa), Sebu/Domang (Lachung Dzumsa), Chyakhung (Naga Forest) and Tholung (Upper Dzongu) are 7, 8, 2 and 1 respectively. It will be relevant to quote paragraphs 3, 5 and 6 of the said affidavit:

"3. PROVISON OF FEED & FODDER DURING THIS COMING WINTER MONTH:

- i) For feeding Yaks in a critical winter season, adequate feed in terms of Complete Feed Block has been arranged, already 9375 Kgs and 1000 Kgs of Chelated Mineral mixture have already been distributed to the Yak herders. There would be no dearth of feed to feed yak in the event of the calamities. Department have made full preparation to meet the challenges in order to prevent the repetition of tragedy.
- ii) The feed & fodder assistance package as aid from the Government has been so planned, assuming the ground reality that the package shall focus on the feed requirement of the vulnerable animal group, in particular. The stakeholders (Yak owners) have also agreed to arrange for timely stock of local dry doffer and feed as a participatory contribution from their end and store them in the hay go-downs built by the Government at different locations for community utility purpose. The Department of Animal Husbandry and Veterinary Services has already issued the supply order for 20 M.T

(Metric ton) of Complete Feed Blocks (CFB weighing 1.8 Kg each/block) to the National Research Center on Yaks, ICAR, Dhirang-Arunachal Pradesh, which is likely to be delivered by the 1st week of November 2019 in two consignments. This consignment of CFB, along with the herder's contribution of local feed & dry fodder and buffer stock of recent distribution programme would adequately suffice the much needed balanced and subsistence diet.

- iii) Also, a buffer stock of feed & fodder procurement fund will also be set aside under Natural Calamity fund of D.C (North) as a contingency plan to ensure that such unprecedented strategy as witnessed last winter, is not repeated in future, duly honouring the directives of the Hon'ble High Court.
- iv) That during the last meeting held on 20/09/2019 with Lachen Pipon, Yak Owners and Yak herders, it was expressed that traditionally the Yak owners and the Yak herders conserve the fodder in the form of hay starting from the month of November, which is primarily the main source of diet during lean season apart from grazing. It was also expressed by some herders that the hay from the previous season is still in stock.

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5. <u>CONSTRUCITON OF PERMANENT SHELTER</u> FOR YAK HERDERS & YAKS:

Majority of the Yak herders in North Sikkim do not possess any plot of land registered against their name in the highland Yak rearing areas and hence they have since resided in the temporary stone walled dwellings, guarding their flock of animals in the vicinity. However, as submitted in our earlier affidavit, the department has indeed made an earnest effort thus far, by constructing 7 Nos. of Hay storage go-downs at different locations under Lachen & Lachung Dzumsa and 3 Nos. of Cold community Yak shelter cum Feed & Fodder Storage Godowns Lachen & Lachung in Community/ at Departmental lands to provide shelter the to milking/old/young calves and ailing animals mainly during winter months. Nevertheless, the Government shall explore all possible ways and means to address this pertinent issue as desired by the Hon'ble High Court of Sikkim.

The detailed list of Cold community Yak shelter-cum-Feed & Fodder Storage Go-downs at different locations under Lachen & Lachung Dzumsa may kindly be seen below:

S1.	Type of	Location	No.	Status of	Jurisdiction of
No.	Infrastructure			Land	Dzumsa
1.	Hay storage Go-	Rabum	1	AH&VS	Lachen Dzumsa
	down			Deptt.	
2.	Hay storage Go-	Dengna	1	Community	Lachen Dzumsa
	down			land	
3.	Hay storage Go-	Temchi	1	AH&VS	Lachen Dzumsa
	down			Deptt.	
4.	Hay storage Go-	Samdong	1	Community	Lachen Dzumsa
	down			land	
5.	Community Yak	Talam	1	Community	Lachen Dzumsa
	shelter			land	
6.	Community Yak	Byamzey	1	Community	Lachen Dzumsa
	shelter			land	
7.	Hay storage Go-	Thangu	1	Community	Lachen Dzumsa
	down			land	
8.	Hay storage Go-	Muguthang	1	Community	Lachen Dzumsa
	down			land	
9.	Community Yak	Namdosa	1	AH&VS	Lachung Dzumsa
	shelter			Deptt.	-
10.	Hay storage Go-	Leema	1	Community	Lachung Dzumsa
	down			land	-

The photograph depicting the ongoing construction of community yak shelter-cum-Feed & Fodder Storage Infrastructure at Byamzey under Lachen Dzumsa, North Sikkim is annexed and marked herewith as Annexure-R-2.

The Department of Animal Husbandry and Veterinary Services has proposed to construct inter-connected animal grazing paddocks built in M.S pipes with R.C.C supported posts in between with M.S bolt system gates interconnecting each grazing paddock/enclosures to the The department intends to take up this pilot venture at the departmental land located at Zeema-II in Lachen for which a proposal is under active & consideration in the Planning Development Department.

6. <u>PROVISION OF VETERINARY AID & HEALTH CARE TO YAK:</u>

Animal Husbandry & Veterinary Services Department under the technical supervision Veterinary Officer, Sub-divisional Veterinary Hospital, Chungthang, Livestock Inspector and technical field assistants posted under Lachen & Lachung Veterinary dispensaries have been conducting health care services from time to time. This year also, the North district administration has already set aside a fund of Rs.40,000/- (Rupees forty thousand) only from the fund provided by the Sikkim Livestock Development Board (SLDB) Cell of the Department to conduct 4 Nos. of such Health Camps at the Yak Herder's Backyard in 4 different locations under Lachen and Lachung area. The Department has also constituted a medical team of North Sikkim to provide treatment and care to the yaks during the time of exigency.

Additionally, one Bolero Camper PS4 WD is getting ready at the workshop which will have accessory items such as Siren & Loud speaker. The nomenclature of the vehicle would be 'Highlanders S.O.S Vehicle' which would bear the Contact Nos. of the Head of District (H.O.D), concerned area Veterinary Officer & Livestock The second seat provision in the vehicle Inspector. provides ample scope for a team of 4-5 departmental officials to move as a Task force/QRT, while the open dickey at the back aids in transportation of medicines, feed/fodder and other essential relief items. The siren and loud speaker fitted in the vehicle will enable the QRT to transmit/convey message of their arrival to the distressed herders scattered across different location in the valleys. Availability of such a vehicle would greatly help in saving valuable time and render quick delivery of services at the nick of time.

13. The order of this Court dated 23.10.2019 indicates that the learned Additional Advocate General had submitted that the affidavits filed so far on behalf of the State Government had not addressed certain issues, such as how and what manner the information of any natural calamity would percolate down to the District Administration or to the State functionaries, which is the first step that would propel initiation of remedial measures and, accordingly, her prayer for filing an additional affidavit was accepted. This Court observed that as the winter season has almost set in, it is time that the State Government comes out with a detailed affidavit so that this Court may make appropriate consideration at an early date. Subsequent thereto, an affidavit dated 11.11.2019 was

filed by the Secretary, Department of A.H.&V.S., Government of Sikkim. It is stated therein that in normal circumstances, the available pasture in up-migration route and fodder reserves for vulnerable animals used to be sufficient during winter months. It will be relevant to quote paragraphs 4 and 5 on the issues of (i) percolation of information of any natural calamity to the District Administration and State functionaries and (ii) remedial measures for upcoming winter respectively.

"4. PERCOLATION OF INFORMATION OF ANY NATURAL CALAMITY TO THE DISTRICT ADMINISTRATION AND STATE FUNCTIONARIES:

- A. North District Administration/District Disaster Management Authority and Sub-divisional Administration/ Disaster Management committee have been activated for the preparedness of upcoming winter season.
- B. The Department of Animal Husbandry & Veterinary Services, North District Administration has communicated to Indo Tibetan Border Police (I.T.B.P.) for relay of first-hand information on the prevailing weather condition of the high-altitude areas for effective monitoring of the health of the animals. The Paramilitary forces particularly ITBP were very helpful during the crises in April-May 2019. The Yak Harders will be in constant touch with the I.T.B.P. in the event of inclement weather and possible calamity.

A copy of letter written to the Commanding Officer/ Commandant, 13 Battalion, I.T.B.P., Lingdum, Ranka in regards to communication of prevailing weather condition in high altitude areas of North Sikkim & acknowledgment letter from I.T.B.P. are annexed and marked herewith as Annexure-R-1 (colly).

- B. In the event of disaster, the I.T.B.P. will communicate directly to the North District Administration/District Disaster Management Authority and Sub-divisional Administration/Disaster Management committee and vice-versa.
- C. The Sub-Divisional Magistrate of Chungthang Subdivision has also been instructed to devise a protocol for suitable mechanism for such situations. An interdisciplinary meeting was held on 9th November 2019.
- E. For the weather forecast, the Department sought a short and long-term weather forecast especially on Snowfall from Metrological Department. The Metrological Department has provided the local webside (www.imdsikkim.gov.in) and for further interpretation of the information, they will be in touch with the The constant Department. information will be relayed further on to the concerned District and Sub-divisional functionaries. A copy of letter from Metrological Department alongwith various data is annexed and marked herewith as Annexure-R-2 (colly).
- F. Apart from aforementioned communication arrangement, the Department of Animal Husbandry and Veterinary Services has also posted two dedicated staff in Muguthang and Lashyar Valley (Gurudongmar) who will be stationed with the

Herders for dissemination of information and firstaid. The names of the staff are – Mr. Tshering Ongyal Lachenpa for Muguthang and Mr. Tamding Chewang Bhutia for Lashyar Valley (Gurudongmar).

5. REMEDIAL MEASURES FOR UP-COMING WINTER:

A. FEED & FODDER ASSISTANCE PACKAGE FROM THE GOVERNMENT:

Yaks are semi-wild animals, thrifty and hardy by nature which requires human assistance for their continued existence. They have the ability to survive under stressful environmental conditions, without food and water for over 15 days' period. However, unlike the agile and normally healthy adult male Yaks, the female Yaks which are either in pregnancy/nursing stage, old/senile animals, young growing calves and ailing animals are in most instances lie vulnerable to the unexpected winter climatic conditions, particularly during the upward migration period.

Various photographs of Muguthang Valley/I.T.B.P camp & Lonak La Pass (Muguthang Pass) are annexed and marked herewith as Annexsure-R-3 (colly).

Considering the frequency of heavy and prolonged snowfall and the information/s gathered from the locals, it has been learnt that such event like last incident had occurred approximately after a gap of twenty-five long years and has not been observed annually. Thus, taking into account of location viz land-locked nature of Muguthang region which has been identified as most vulnerable area, the

Department has estimated and made provision of stocking of Feed and Fodder for sixty days at the rate of 1.5 kg per animal for 933 nos. of Yaks of Muguthang area which comes to 84 M.T. In the Muguthang region (Tsangtha) the Department has a storing facility (Hay Godown) with a plinth area of 31 ft x 31 ft which can store 36 Metric Ton. For storage of remaining stock, the Herders have already been communicated by the Sub-divisional officials and found to have enough storing facility.

- **B.** Of the total requirement of 104 M.T of Feed and Fodder, the I.C.A.R-National Research on Yak, Dirang, Arunachal Pradesh is able to supply only 34 M.T within the end of November. The remaining stock will be procured locally as per the formulation prepared by I.C.A.R-National Research on Yak.
- C. For the provision of Feed and Fodder for other areas in the event of any calamity, a buffer stock of 20 M.T has been provisioned at Rabum, North Sikkim which is centrally located for both Lachen and Lachung axis.
- **D.** Apart from Feed and Fodder assistance from the State Government, the stakeholders (Yak owners) have also communicated through their Pipon stating that there are some fodder reserves at their disposal.

A copy of correspondence from Pipon, Lachen Dzumsa and Yak Herders on routine and traditional practices and availability of fodder is annexed and marked herewith as Annexure-R-4.

E. In the event of such calamity and insufficiency of Feed and Fodder provision made by the Department, for the back-up, the required assistance will be provided from the N.C fund of D.C (North) as a contingency plan by any means.

F. ARRANGEMENT OF SPS UTILITY VEHICLE:

One dedicated multi-purpose Bolero Camper has already been provided to the Sub-division Veterinary Hospital, Chungthang which is fitted with fog lights and siren and requisite fabrication, as a means of distress signal to attend to emergency veterinary need of the yak herders. The said vehicle is equipped with all necessary medicines and equipment for onthe spot Veterinary treatment. Monitoring and patrolling of all Yak herding areas have already started.

Photographs showing patrolling and monitoring by the team is annexed and marked herewith as Annexure-R-5 (colly).

G. The Sub-division Veterinary Hospital, Chungthang under the Department of Animal Husbandry and Veterinary Services has also formed a Yak Health Care and Rapid Response Team (RRT) which would consist of the following members: 1 Veterinary Officer, 1 Livestock Inspector, 1 Junior Stockman (Para-veterinarian) and additional ten Sub-ordinate staff. The team will be supported by District level and State level Disaster Management Team. This team will have a range of duties and powers primarily for preventive and curative health

management, relief, rescue and rehabilitation during calamities. The RRT team shall also be responsible for pre-emptive measures prior to any calamity. A WhatsApp group of local R.R.T has also been created. A copy of office order dated 11/11/2019, constitution of Rapid Response Team at the Field level is annexed and marked herewith as Annexure-R-6.

H. PROVISION OF VETERINARY AIR & HEALTH CARE TO YAKS:

As is the routine practice, the AH&VS department under the technical supervision of Veterinary Officer, Sub-divisional Veterinary Hospital Chungthang, Livestock Inspector and technical field assistants posted under Lachen & Lachung Veterinary dispensaries have been conducting vaccination programmes as per schedule mainly against the Foot & Mouth Disease (FMD) to which Yaks are found to be most susceptible. Basic health care facilities and other necessary services are also extended to the herders from time to time as per reports and verbal appraisals. The department has also been organizing ambulatory clinics annually in the month of November-December, which involves reaching out to the grievances and treatment of different Yaks ailments and de-worming programs at the Yak herder's backyard including training and awareness camps. Over the years, it has been seen and observed that this programme has been widely appreciated by the yak herders. In addition, the team from NRC on Yaks-ICAR has also been gracious enough to visit the

area and distribute Yak First-Aid Kits to the Yak herders."

- The affidavit in the form of suggestions has also been placed on record by the Amici Curiae. In paragraph 3 of the said affidavit, it is stated that around 1000 yaks along with its herders will be in and around Muguthang region and approximately same number of yaks will be in and around Gurudongmar and, therefore, the State Government should immediately make provision to supply complete feed block and chelated mineral mixture fodder enough to last for 3 months (approximately 1,80,000 kg) to the yak herders at Muguthang and Gurudongmar, which should be taken as a short term measure and the same should be done before the end of November, 2019. They also suggest use of local materials, such as stones and wood, for any construction to be made with regard to yak related activities.
- 15. Complete Feed Block Technology is a latest development of feed technology to exploit the potential of locally available animal feed resources besides using non-conventional feed resources in a better way that makes livestock farming an economically viable enterprise. Complete feed block is an intimate mixture of processed ingredients including roughages and concentrates designed as the sole source of feed in compressed form. In an article "Indigenous Traditional Knowledge of Yak Rearers" published by the Director, NRC on Yak, Dirang, Arunachal Pradesh in August 2009, in the context of seasonal migration and grazing

pattern, it is stated that the seasonal migration and grazing pattern is based on yak keepers traditional knowledge which takes into account thermo neutral zone for yaks and gives time for growth of grass. Traditional yak husbandry system involves migration in search of better pasture. In India and other neighbouring countries like Nepal and Bhutan, the farmers practice two pasture utilization strategy. During the summer, yaks are taken to higher altitude alpine pasture (4,500 m and above) and in winter, they return to pockets nearer to the villages located at mid altitude (3,000 m above mean sea level). Grazing in summer pasture is from May to September while in December to February, winter pastures are utilized and the rest of the period is spent on transit from

16. From the materials on record, it has emerged that there had been an unprecedented snowfall in the higher regions of North Sikkim and the same had occurred after a gap of about 25 years. As such a phenomenon is not an annual event, the administration as well as the yak herders were caught off guard and were least prepared to deal with the situation. It is also noticed that Muguthang region has been identified as the most vulnerable area. Though relief materials were collected, the same could not reach Muguthang and Lashyar Valley because the areas remained inaccessible.

winter pasture to summer pasture.

17. From the reports and affidavits of the respondents, it appears that after this Court had taken up this Suo Motu PIL, the respondents had

engaged their attention for welfare of the yaks and some steps have been taken to that effect. It is categorically stated that there will be no dearth of feed to feed yaks in the event of a natural calamity and that the respondents are fully prepared to meet any challenge. It is noticed that a Yak Healthcare and Rapid Action Team had been formed which will be supported by the District level and State level Disaster Management Team. A multi-purpose Bolero Camper had also been provided to attend to emergency veterinary need of the Yak herders. Two dedicated staff had been posted in Muguthang and Lashyar Valley to act as an interface of the administration with the Yak herders for dissemination of information. It is noticed that assistance and help of ITBP would be sought for obtaining first hand information relating to prevailing weather conditions and the respondents had also taken the Metrological Department on board.

18. Though Hay Godown-cum-Yak Shelters numbering 10 are stated to have been constructed, it does not appear that any such facility has been constructed in Muguthang and Lashyar area. To avert a situation of the kind which was witnessed in the last winter, should there be snowfall like the previous year, respondents shall consider whether it will be advisable to set up a couple of such facilities in those two areas as the past experience had shown that neither the yaks can come down nor relief materials can reach when it is most needed because of thick blanket of snow. As stated in the affidavit dated 01.10.2019, the respondent shall

take a decision with regard to construction of paddock and supply of essential items, such as tents.

- In a matter of the present nature, it is the State which has to adopt and formulate strategies to combat a disaster. As indicated earlier, the Court had to step in because of the calamity and to nudge the respondents to come up with appropriate measures to tackle the situation should there be a recurrence of unprecedented snowfall for a prolonged period. While some steps, as noted hereinabove, have been taken, it will be necessary for the respondents to be vigilant and they must take immediate rear-guard action with no loss of time by implementing the decisions in the field.
- We also notice that some decisions such as the decision to set up a buffer stock of feeder and fodder procurement under the Natural Calamity Fund of Dy. Commissioner, North, as a contingency plan, has not actually been implemented. The State respondents are directed to implement in letter and spirit the decisions taken and steps contemplated, as indicated in the reports and the affidavits.
- 21. We further notice from the affidavit dated 06.07.2019 that exgratia of Rs.45.90 lakh, though stated to be payable on account of death of Yaks due to starvation, the same does not appear to have been paid to the rightful recipients of the amount. The respondents are directed to

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disburse the aforesaid amount within a period of four months from this date.

22. With the above observations and directions, the PIL is disposed of.

(Bhaskar Raj Pradhan) Judge (Arup Kumar Goswami) Chief Justice

Approved for reporting: Yes/No
Internet: Yes/No

pm/avi