

Fodder Bank: Source of fodder

for livestock during the drought period in arid Kachchh region

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Kachchh is a district of Gujarat state, located in the western part of India well known for its natural wetlands. Livestock rearing is the main occupation and remains the only source of cash revenue for subsistence farms, especially during drought periods in the Kachchh arid ecosystem. It also provides insurance in case of crop failure. Hence, the region has a livestock population larger than the human population, which is a unique feature of the region. Thus, there is an opportunity to enhance the livestock productivity by supplying an adequate quantity of fodder, particularly during lean or drought period. A fodder bank is one of the way to solve the fodder scarcity during lean or drought periods in order to prevent migration, distress sales and starvation of livestock.

Keywords: Arid region, Drought, Fodder bank, Kachchh, Livestock

KACHCHH includes the great and little Rann and has the world famous Banni grassland. The climate of Kachchh is typically arid; it experiences scanty and highly erratic rainfall (average annual rainfall 335 mm) with a high coefficient of variation. Kachchh represents a typical rural-based economy as 70% of its population resides in rural areas. Hence, agricultural enterprises are the major source of livelihood for the rural population. Among agricultural enterprises, livestock plays an important role and more often, especially during drought periods, it remains the only source of livelihood for the people (the Maldhari community), mainly involved in livestock rearing. The major sources of fodder in the Kachchh are crop residues, grasses, tree-based feeds and natural



Fodder stored in depot for distribution

vegetation in current fallows as well as uncultivable lands. Apart from the above, during normal rainfall years, the crop residues and crops, viz. wheat straw, sorghum stover, bajra stover, groundnut haulm, barley straw, castor straw, cotton

straw, cotton seed hull, mixed grasses and oat also become the main source of animal feed. However, during drought periods (frequent in the region), the availability of crop residues and fodder is drastically reduced. The regeneration and re-growth of natural vegetation is also severely affected by drought because of the non-availability of moisture and also due to higher incidence of browsing, lopping, cutting of trees and shrubs for fodder and fuel purposes. So, to overcome the problem of fodder scarcity, especially during severe drought periods, the state government creates fodder banks at selected places to distribute fodder among cattle breeders to avert the possibility of their migration from the district to other areas, besides arresting the distress sale and loss of animals.



Buffaloes of nearby villages feeding dry fodder at a cattle camp in Lakhpat taluka



Cows of nearby villages feeding green fodder at a cattle camp in Lakhpat taluka

Fodder bank

A fodder bank is a unit or place where excess fodder produced during the cropping period and purchased fodder is stored with the sole purpose of with fodder scarcity during the drought period. The fodder banks are mostly maintained and run by either particular communities, Non-Government Organizations (NGOs), gaushalas or governments, mostly in arid or dryland regions where the occurrence of drought is a frequent phenomenon.

Management of fodder banks

The proper functioning of fodder banks is ensured by different district-level agencies and government departments like district level dairy farmers (cooperatives, NGOs, and Gaushalas), district rural development agencies, Forest and Revenue Department, and Animal Husbandry Department. The district level dairy farmers' cooperatives or NGOs/Gaushalas are mainly involved in establishing the fodder banks/depots and the

district rural development agencies provide finance to cover the shortfall for operating the fodder banks. However, the Forest and Revenue Department facilitates collection and transportation of fodder from various sources, and the Animal Husbandry Department monitors the quality of the feed, provides information on demand and supply of fodder, and also assists in the disbursement of surplus fodder in scarcity areas. Besides, the distribution of fodder at a subsidized rate through fodder banks and cattle camps, the state government also encourages farmers to go for fodder cultivation in the event of receiving a short spell of rain by giving fodder crop seeds at a subsidized rate. The Gujarat State Seed Corporation (GSSC) entrusted the responsibility of distribution of seeds of fodder crops, viz. sorghum, pearl millet, lucerne and oat to the farmers at a subsidized rate with a maximum cap of ₹2000/acre/farmer only. A survey of 26 cattle camps/fodder banks operating in two talukas (Mundra and Lakhpat) of Kachchh

district was done in the year 2014–15 to understand the management of cattle camps/fodder banks in the arid Kachchh. It was observed that, on an average, each operating cattle camp was serving approximately 300–500 large animals (cattle and buffaloes), which were brought from the nearby villages. The site for the setting of fodder banks or cattle camps and the distance between two cattle camps was decided by local administration with the consultation of stakeholders looking into the severity of drought. The present distribution system of fodder was transparent but not adequate to provide relief to the farmers of the area as each farmer on an average had maintained a minimum of 10–15 productive animals and fodder distributed through fodder banks at a subsidized rate was not enough for all animals to survive. The distribution of fodder was being done by the revenue department by issuing fodder distribution cards. The fodder was being issued at 4 kg of dry fodder/cattle/day @ ₹2/kg from the fodder depot only for a maximum of five productive animals at a time for one week.

In the absence of fodder banks or cattle camps people start abandoning their unproductive cattle due to the non-availability of fodder, which causes large scale cattle deaths in the area. People start distress sales of their cattle. Maldharis are compelled to migrate to other areas with their livestock. Chronic poverty prevails as livestock is the main source of livelihood for a larger rural population of the district.



Cowherd at cattle camp/fodder bank maintained by a Gaushala in Mundra taluka

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Strategies to further increasing the functioning of fodder banks

Despite playing a very prominent role in providing direct benefits to small and marginal farmers of the district, the operation of fodder banks is not economically viable, particularly during the period of good monsoon, as the stored fodder mostly goes to waste due to the non-availability of potential buyers. Therefore, it is necessary to provide financial assistance to the agencies involved in operating fodder banks to compensate for the losses. Furthermore, the fodder

banks need to be established at panchayat level taking the given points into consideration to sustain the activities of fodder banks on a sustainable basis in arid Kachchh.

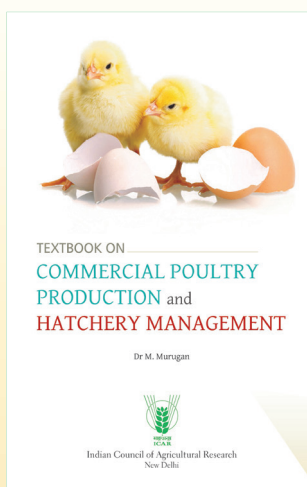
SUMMARY

Livestock is the major source of livelihood for the farming community of Kachchh. During drought period, livestock sector is affected largely due to the scarcity of fodder resources. The scarcity of fodder to livestock in the region leads to loss and distress sale of animals as well as large scale migration of maldharis (family involved in the rearing of cattle) to other areas in a bid to save their cattle from starvation. Thus, Gujarat

government with the help of other district-level agencies started fodder banks/cattle campus at selected localities in Kachchh to provide fodder to livestock rearer at 4 kg dry fodder/cattle/day at ₹2/kg only for maximum 5 productive animals for a week. In addition to establishing fodder banks/cattle campus, the state government also distribute seeds of fodder crops through Gujarat State Seed Corporation to the famers on the subsidised rate with a maximum cap of subsidy of ₹2000/acre/farmer. Fodder distribution through fodder banks/cattle campus is a much-appreciated initiative of government for dealing with fodder shortage during drought period but extends only partial relief to the farmers as it provides subsidised fodder to only 5 productive animals, not for all animals maintained by particular farmers. So, there is a need to have the provision of providing fodder to all productive animals with increased quantity through fodder banks in order to provide complete relief to the farmers of Kachchh during drought period.

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TECHNICAL SPECIFICATIONS

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