

Pastoralism in India: the Warp and the Weft

Discussion Paper



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Design & Print:

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The Rainfed Livestock Network is a consortium of organisations working on issues of natural resource management and livestock. The Network emerged from the need to articulate an alternative livestock development paradigm for dry land areas. It proposes to build up ground level evidence to influence policy formulation process taking a composite view of systemic interactions with agriculture and natural resources, the multi functional nature of livestock, and key factors influencing livestock keepers.

The Network envisions a vibrant, Indian livestock sector, especially in the marginalized rain-fed regions, which is the outcome of a holistic approach in policy-making involving socially, ecologically and economically sustainable initiatives that take into account the knowledge and contributions of India's pastoral and small-holder livestock keepers and their indigenous breeds and ensures that they benefit from what the modern world has to offer without causing a disruption in their customs, traditions and way of life.



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Executive Summary

Pastoralism – an old dynamic production system prevalent throughout the world – is economically productive and ecologically sustainable, and uses variability in a positive way. Yet, pastoralism does not get the recognition it deserves.

Pastoralists are highly adaptable to variable and difficult environments and make dynamic use of resources; they have the ability to synchronize with other production systems, make optimal use of resources, and are ecologically friendly.

Pastoralists are believed to form 7% of India's population, i.e., about 88 million people, inhabiting mainly the arid and semi-arid areas of the country. The pastoral communities are not one homogenous group; livestock is their chief asset and source of livelihood and the nomadic pattern of living enables them to make optimal use of dry fragile and marginal landscapes. Internationally, pastoralists are lumped under the mobile and indigenous community's category, a space often taken by adivasi communities in the Indian context. While adivasi communities and Scheduled Tribes have a Ministry of Tribal Affairs, no such ministry exists for pastoralists, which accounts for the fact that there are few provisions for them despite their significant contribution to the economy and geographic spread across the country.

Basic services and benefits such as essential rations and those related to health and education are not available to the pastoralists as they have no permanent address and do not own land. In some states development groups are facilitating the process but a lot more needs to be done. Several pastoral groups have now made a claim to be documented under Scheduled Tribes for a better chance of recognition of their rights.

Pastoral production systems are unjustly blamed for degrading and destroying environments, though they have been known to make significant contributions to the maintenance of ecosystems especially those which are unsuitable for agricultural production. Pastoralists also share their grassland ecosystem with rare and endangered species of wildlife, and are indirectly responsible for their preservation.

The free market world and organic movement have been responsible for a change in perceptions about pastoralism which is slowly gaining acceptance and recognition for its value. In fact, surveys have shown that several non-pastoral communities have adopted this production system successfully. Despite this, pastoralists themselves have mixed opinions of the future – they admit that their lifestyle

is fraught with hardships, risks and uncertainty, yet they feel that their profession has a future as there continues to be a huge demand for their produce.

Given the fact that pastoralism as a profession across the country has a future, and that pastoralists make a significant contribution to the grassland ecosystem, and therefore deserve recognition and support, the authors make a few recommendations as follows:

1. Recognize pastoralists and the pastoral production system as a viable, distinct and critically important one.
2. Recognize mobility as an essential feature of pastoralism and pastoral production systems.
3. Establish clear identity for pastoralists and identification documents to enable essential services of health (human and animal) and education for pastoral groups and their livestock irrespective of their location.
4. Review and rework existing policies on livestock, forest, agriculture, land and revenue so that they are supportive to needs of pastoral production systems.
5. Give secure access and rights to common pool resources to pastoralists in flexible and dynamic ways.
6. Plan new infrastructure projects taking into account the movements of pastoralists and their traditional migratory routes.
7. Recognize services rendered by pastoralists to the ecosystem in terms of maintaining grassland and forest ecosystems and the biodiversity.
8. Provide insurance and risk cover for pastoralists.
9. Develop clear policies on organic livestock at the national level.
10. Institute a Ministry of Pastoralism to take care of the special needs of pastoralists and pastoralism.

Background

Pastoralism is a production system which is prevalent in almost every continent of the world. It is an ancient system. In the recent past, several people working in the field of development have observed that this system is both economically viable and productive, contributing to the economy in several unseen ways, as well as ecologically sustainable, using common pool resources creatively. The system is a dynamic production system using variability, including climatic variability, in a positive way. Socially, pastoralists and pastoralism present vivid and interesting contrasts to existing rural agrarian landscapes and emerging urban ones.

So what is pastoralism, where does it exist? Who are pastoralists? Are they poor? If so, how poor? Do they need external help? Are their living standards adequate? Do they match the sustainable development goals? Do their children receive education? What kind of education do they require? What kind of leadership exists within the community? Is that leadership adequate? If not what kind of leadership is necessary? Is their lifestyle worth it? Do they want to change it? What future do they imagine for themselves and their children?

To understand these questions better and to find answers at least in the Indian context, three workshops were held in 2010 where pastoralists, groups working with pastoralists, researchers, academics, scientists, gender specialists, historians and development workers came together to discuss and deliberate. The workshop held at Yashada (Yashwantrao Chavan Academy of Development Administration) Pune, Maharashtra, brought together groups from southern and western India who represented the states of Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, and Maharashtra. The next workshop held at the IAS (Indian Institute of Advanced Study) Shimla, brought together pastoralists, researchers, NGOs and academics from the Himalayan states of Jammu and Kashmir, Himachal Pradesh, and Uttaranchal. The third workshop was held at CAZRI (Central Arid Zone Research Institute) in Jodhpur, Rajasthan and saw scientists, pastoralists, NGOs, researchers, and groups from the states of Rajasthan, Haryana, and Gujarat in western India. Following these workshops, members of the Rainfed Livestock Network have been conducting smaller studies to further understand these production systems.

The workshops and further studies concluded that pastoralism is not an ancient dying system but a modern, thriving one which adapts to changes in positive ways. In fact, it was seen that several communities who were not pastoral in the past have adopted this system of production and taken it up successfully.

Perceptions about Pastoralism

There are several perceptions about pastoralism and pastoralists. Since it is largely visible in the drylands it is viewed with the same lens as the drylands are. They are seen as unproductive, backward and unreliable. The drylands are perceived as problem areas by the State – forsaken, resource poor, non-productive, barren, fragile, overgrazed, backward and conflict ridden – and the same adjectives are often used to depict pastoralists globally. In a similar vein, pastoralists too are considered unproductive, backward and poor. As these metaphors creep into the development discourse a popular call for several years now has been to label pastoral systems as underdeveloped systems which need to be mainstreamed or sedentarized.

However, there are quite a few narratives within the pastoral discourse which see drylands and the people who inhabit them, including pastoralists, differently. Amongst a section of development workers and scholars, pastoral systems have begun to be recognized as resilient, sustainable, capable of adapting to difficult situations easily, capable of making sensible and optimal use of resources, ecologically friendly and contributing to the economy directly and in several hidden ways. To illustrate, according to literature related to animal science and reports from the erstwhile Planning Commission, India has been declaring that it is deficient in fodder resources for several decades. Yet, according to our livestock census figures it is seen that our livestock population has increased substantially. We rank amongst the highest producers of milk and meat in the world and most of the milk and meat comes from pastoral production systems where they feed under extensive and open grazing systems. This paradox can only be explained by the fact that much of our fodder sources are invisible and not recognized by formal science and policy makers as are our pastoralists (Kapur, Ravindranath, Kishore, Sandeep, Kavoori, & Chaturvedi, 2010).

“Almost all the small ruminant meat consumed in India and a large part of the milk comes from pastoral sources.”

What is Pastoralism and Who are Pastoralists

Pastoralism is a production system dependent on herding livestock. It may be nomadic, semi-nomadic or transhumant. Globally, pastoral systems are normally characterized by low population densities, high mobility and dynamism, complex information systems and a high dependency on local knowledge (Kratli, et al., 2015). While practitioners of pastoralism are often seen as being socially, economically and politically marginalized, they have also been known to make significant contributions to national economies, and to the maintenance of ecosystems especially those which are unsuitable for agricultural production.

1 Ministry of Social Justice & Empowerment, Government of India (2008), Report of the National Commission for Denotified, Nomadic and Semi-Nomadic Tribes, New Delhi.

In India, pastoralists are believed to form 7% of India's population¹ which is about 88 million people inhabiting mainly the arid and semi-arid areas of the country. Geographically, they exist from Ladakh in the North to Tamil Nadu in the South and from Kutch in the West to Arunachal Pradesh in the East. Livestock is their chief asset and source of livelihood and the nomadic pattern of living enables them to make optimal use of dry, fragile and marginal landscapes. The pastoral communities of India are not one homogenous group. There are several groups herding a variety of animals from yak and camels in the North to ducks in the South and to pigs in the East. Their relationship with settled or sedentary communities is also varied and a single lens to view the pastoral discourse would be unfair to this diversity. Amongst the better known pastoral groups are Gujjar, Bhakarwal, Gaddi, Rebari, Raika, Dhangar, Kuruba, Kuruma, Golla and the Toda.

The Pastoralist Identity

The pastoralist identity is a varied one, shaped by the geographical setting, the kind of livestock they herded, to the agro-pastoral practices in the area, the relationship with different communities in the region and the ownership or non-ownership of assets such as land, property, etc. Mobility is another factor which distinguishes one group of people from another. The extent of mobility defines the lifestyle and livelihood. The mobile and itinerant lifestyle is shared with several other nomadic and itinerant communities in the country, ranging from communities who were traders like the Banjara and Lamhani, to entertainers like the Kolhati and Nat and hunter-gatherers like the Pardhi, Van Baghariya. Thus the pastoral identity of each group is distinct but also has overlaps with several other groups in India.

The erstwhile rulers of Indian kingdoms were likely to view pastoralists kindly, often gifting them land as reward for support during war (Jats being a case in point). Interstate permits across small kingdoms were also issued to pastoral groups in Rajasthan and Gujarat to give them unhindered mobility especially during drought years. They were also given permits to graze in special/ protected areas. They were the official herders and breeders for various rulers of these princely states. British India took a rather harsh view of such communities and took every opportunity to sedentarize them. This was because it was not possible to trace them or tax them. In general, the colonial view of itinerant communities was far from kind and several itinerant communities were even labeled criminal, such as the Pardhi and Ramoshi in Maharashtra, the Kuravars in Tamil Nadu the Sandhi in Gujarat, the Bawri in North India (Independent India has not helped solve the problem and the pastoral identity remains complex and confused, shifting between categories such as Other Backward Castes (OBC) Rebaris and Raikas (Rebaris within the Gir forest though are Scheduled Tribes); Backward Caste (BC) Kurumas; Scheduled Caste (SC), Nomadic Tribe (NT) Dhangars; Scheduled Tribe (Bharwad), Gaddi, Bhakarwal, Mon, Changpa, etc., depending on the state.

Internationally, they are sought to be lumped under the mobile and indigenous community's category, which creates confusion within the Indian context as this space is often taken up by adivasi communities. Thus pastoralists have been negotiating spaces not only in grazing areas, pastures, village commons and forests but also in the political arena and "reserved" categories – the Gujjars of Rajasthan and the Dhangars of Maharashtra wanting to be included amongst the Scheduled Tribes of their state being an example.

Despite the problems and the neglect, the risks and the uncertainty for pastoralism continues, using fresh strands weaving new patterns. Some of the emerging patterns noticed are:

New migratory routes: Post the Green Revolution and intensive agriculture in the northern states of Punjab and Haryana, large tracts of land lay exhausted and waste in response to the insatiable demands of modern agriculture. In an interesting new development shepherds from Rajasthan are being invited back to make the lands fertile again.

New lands are being grazed: Even as traditional pasture lands get diverted to other use and the grasslands shrink, pastoralists discover fresh grazing lands, in factory sites and vacant urban plots, along canal bunds and by the sides of roads, under windmills and beyond dams. Livestock owned by pastoral groups have been seen to adapt to saline lands and mangroves such as the camels in Saurashtra and the buffaloes in the Chilika lake in Orissa (Sahu, Balaram, pers. comm.). Maldhari pastoralists in Maharashtra have worked out interesting reciprocal arrangements with corn growers, popcorn factories and sugarcane growers (Kratli S. 2015).

New breeds adopted: As new markets emerge and traditional markets disappear, pastoralists adopt new breeds of livestock which are better suited to new demands. Examples are the Madgyal sheep in Maharashtra, Yelaga sheep in North Karnataka and Merino crosses in the Himalayas for increased meat production.

New management strategies developed: Pastoralists have developed several new strategies – some common ones observed are the introduction of more goats into a flock of sheep. The surplus milk available from goats is used to fatten lambs and bring them to the market at a younger age. By selling some lambs at an early age there is always surplus milk in the flock and this enables late growers to get more milk from the weaned ewes. By selling lambs early they also ensure that there are more lambings in a given period. Pastoralists sometimes cross their animals with the local species from the area they have migrated into, such as the Maldhari cattle herders who have permanently migrated into Maharashtra from Gujarat who cross their Gir cattle with local breeds (ANTHRA, 2008). Cattle rearers in the Banni grasslands of the Kutch have made a shift to buffalo from cattle, while cattle rearers in southern Karnataka have made a shift to sheep. In Rajasthan, the Raika took up camel rearing sometime back and are now giving it up as it becomes difficult to rear camels. Pastoralists reduce flock sizes to increase mobility or because there is a shortage of hands. They diversify their income sources by having one family member take up a new profession. Sometimes they expand their

activity by hiring outside labour to graze animals and maintain flocks.

New markets: New outlets for sale, new products, and new markets are constantly being explored and discovered. Maldhari pastoralists have found fresh outlets amongst tea vendors and sweet stalls which come up next to sugar factories and in urban settlements by Maldhari pastoralists.

Flocks have expanded and shrunk in tune with fluctuations in rainfall and changes in climate both environmental and political. In fact, pastoralism as a livelihood has proved both promising and lucrative and while members of the traditional pastoral communities have exited the profession in the hope of improved status and better prospects many new communities have entered the profession too. In Gujarat, the Devipoojaks also known as Waghri, and Sandhi have started rearing goats. In Andhra Pradesh, new groups of Banjaras and Lamhani have started raising cattle in nearby forests. The Boyas in Andhra Pradesh and the Marathas and Ramoshis in Maharashtra have begun rearing sheep.

Characteristics of Pastoralism in India

Some of the characteristics of pastoralists and pastoralism in India are:

- i. **Ability to live in highly fluctuating and variable environments.** Pastoralism as a livelihood in India is seen from the dry deserts of Ladakh across the Thar desert of Rajasthan, the grasslands of Banni to the semi-arid Deccan plateau into the dry districts



of the southern states of Karnataka and Tamil Nadu. Making use of seasonal availability of fodder, pastoralists make optimum use of lands and resources in these areas. This is important in the emerging era of climate variability and change where agricultural systems are showing increased vulnerability. Pastoral systems are able to withstand drought which is a recurrent feature of the drylands. When required they are also able to adjust to variable environments of humid and sub-humid areas.

- ii. **Ability to make dynamic use of resources.** The feature of mobility used by pastoralists makes them capable of moving with their assets which are mainly in the form of animals to new pastures. Since they are flexible spatially and temporally, i.e., in both space and time, they can change direction, change pasture, change time of mobility and thus use resources in a more dynamic fashion than settled communities. The spaces used by pastoralists are largely the commons – forests, pasture and fallows – and these are also often used and shared with other communities. For instance, while pastoralists may utilize the grazing available in an area, a tribal community may depend instead on the non-forest timber produce. Pastoralists have also been quick to adopt new technology such as using vehicles and motorized vehicles to transport, move and shift their herds, and using mobile phones to facilitate quick and easy communication.
- iii. **Ability to synchronize with the environment and other production systems.** Unlike several other systems of production, pastoral systems synchronize with their local environment be it wildlife landscapes, agricultural production systems or even emerging landscapes such as wind farms. Pastoral systems share space with wildlife in the cold desert of Ladakh, in the grasslands of the Banni and the Deccan as well as in the forests of the Himalayas. In many cases, the livestock of pastoralists provide the nutrition for endangered species such as the grey wolf. Pastoral systems adapt to changes in agricultural production systems and change in cropping patterns. For instance, pastoralism and migration from Rajasthan into Haryana and Punjab increased after the Green Revolution as pastoral communities were able to consume the crop residue suddenly available in abundance (Kavoori, 1999). Maldhari herders in Maharashtra have synchronized with the sugarcane production system of the state (Kratli S. 2015). In southern India, where windmills have emerged over large tracts of lands, sheep belonging to pastoral groups can be seen grazing their animals under the windmills.
- iv. **Complementarity with other systems.** The relationship between crop farmers and pastoralists in India is well known and documented. Pastoral groups are invited by settled farmers to herd their animals in the fields of agriculturists. Livestock clear the fields as well as manure them and in turn the livestock get nourishment. Pastoralists also make effective use of common spaces such as fields, forests, watering holes and share them with other users.

- v. **Ability to adapt to difficult situations easily.** Drought and floods are not seen as huge disasters by pastoralists. Often they are seen as opportunities for livestock production. Crops that wilt because of lack of rain in a year due to unseasonal rainfall are good sources of fodder for pastoral groups and very often these pastoral groups buy such fodder from farmers. This helps the farmer too as he is able to recover some of his losses. Print media though often sensationalizes the issue by depicting pictures of cattle belonging to sedentary farmers and not those of pastoralists thereby misleading readers. Mobility helps pastoralists escape the fury of floods and the despair of droughts. They find new pastures after the waters of the floods recede or sell their animals when there are droughts.
- vi. **Capable of making sensible and optimal use of resources.** Livestock are able to distinguish between different types of fodder and grazing resources. Different species prefer different fodder types. For example, sheep, cattle and buffalo graze while goats browse. Even amongst grazers, sheep prefer short grass while cattle and buffalo prefer longer grass. Pastoralists select species carefully recognizing the different preferences of livestock in different landscapes.
- vii. **Ecologically friendly.** In the past if a new dryland area was to be brought under cultivation, pastoralists would be invited to graze in that area. In a short while the combination of grazing and manuring by the animals would bring enhanced fertility to the soil making it suitable for crop cultivation. Grazing by livestock is important to keep grassland ecosystems (Kavoori, pers. comm.).
- viii. **More equitable distribution of assets.** The pastoral production system grows or shrinks in tune to resources such as available labour, grazing areas, water. When family sizes are large and resources abundant herd sizes increase. As family sizes reduce the herd or flock size reduces. Likewise when grazing is abundant herds /flocks are large, when grazing is restricted herd / flock sizes shrink. Pastoral families group, split, regroup according to the fluctuations and changes in dynamic ways. For different regions there are different optimum herd and flock sizes which are in tune with local conditions.

Yet pastoralism as a production system does not get the recognition it deserves.

Pastoralism: Invisible and Unaccounted for

Despite the fact that pastoralists contribute significantly to the economy and are found geographically spread across the country there are few provisions for these communities, except perhaps to a limited extent in the northern states of Jammu & Kashmir and Himachal Pradesh. Scheduled tribes have a Ministry of Tribal Affairs but no such ministry exists for pastoralists. In India, a national identity exists through the registration of births, however children of pastoralists are often born when they are on migration away from hospitals. The births remain unregistered. Identity and existence in India



are determined by proof of residence that exists in the form of voter cards, ration cards and more recently Aadhar cards. Several pastoralists have no permanent address and in most cases do not own land and thus cannot establish proof of residence. Without this critical identity several benefits, which are supposed to flow from the State in terms of services, do not reach pastoral communities including essential Public Distribution Systems, health and educational services. It is only recently that Karnataka state has issued Aadhar cards for all their shepherds. In other states, development groups are facilitating the process but a lot more needs to be done.

Denied Access to Resources and thereby a Livelihood

While pastoralism and livestock rearing are often blamed for degrading and destroying environments, they have been known to make significant contributions to the maintenance of ecosystems especially those which are unsuitable for agricultural production. Studies from Bharatpur in Rajasthan and the Valley of Flowers in Uttarakhand from as far back as the early 1980s speak about the importance of livestock grazing in managing and maintaining special ecosystems (Agarwal A, 1985). The Hanumanth Rao Commission report of the Government of India discovered that the goat was not to be blamed for degrading environments. Likewise, people working closely with livestock have noticed that given an option, animals will not overgraze an area and prefer to move on to fresh pastures thereby allowing grasses to regenerate. Shepherds in Telangana and Himachal Pradesh comment that once a flock has grazed in an area, it has made it “jhoota”² and animals will return to this region only after an appropriate period of at least 48 hours. Placing the blame on pastoral production systems for overgrazing is thus misplaced.

The Dhangars, Kurubas and Kurumas of the Deccan plateau of India, the Maldharis of Kutch, the Raikas of Rajasthan and the Gujjars and Bhakarwals of the Himalayas share their grassland ecosystem with rare and endangered species of wildlife such as the great Indian bustard, the grey wolf, the snow leopard, several types of antelope and birds. Research has shown that the main source of nutrition for the endangered grey wolf are the livestock reared by pastoralists and the restriction of sheep from these areas is likely to have an effect on the grey wolf populations (Jhala, 2003) (Ghotge & Ramdas, 2010). Studies from Africa too have shown that mixed grazing systems of livestock and wildlife had increased heterogeneity and are beneficial for both livestock and wildlife systems as well as for the grazing tract (Fynn, Augustine, Peel, & Wichatitsky, 2016). However, National Sanctuaries and Protected Areas have sprung up in many of the areas which have traditionally been grazing zones for livestock-rearing communities and grazing restrictions have been imposed on livestock owners as they are considered harmful for the wildlife therein. Pastoral families have been termed as “habitual

² “jhoota” is an Indian concept wherein once the lips of an individual touch an item of food it is rendered soiled and cannot be consumed by another.

³ A collaborative project about grasslands, people and wildlife in western Maharashtra.

offenders” in the records of the Forest Department because their animals have accidentally strayed into land which is supposed to be under protection by the Forest Department. They are taxed and harassed and made to pay “unofficial” grazing fees. It is only recently that the Forest Department in some states such as Maharashtra is willing to take a kinder view of pastoralism and pastoral groups (www.ovitla.landga³).

Legal Provisions that do not Provide

The Forest Rights Act which became operational in December 2007 seeks to recognize and vest the forest rights and occupation in forest land in forest dwelling Scheduled Tribes and other traditional forest dwellers who have been residing in such forests for generations but whose rights could not be recorded. The Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Rules, 2008, for implementing the provisions of the Act were notified on 2008. As per the provisions of the Act and the rules framed thereunder, the onus of implementation of the Act lies at the level of the State/UT governments.

While the several areas that pastoralists dwell on are forest lands and pastoralists have traditionally made use of forest areas for grazing their animals, it has been difficult to secure their rights in the same way that tribal groups have. The Act has been framed for settled groups and as several pastoral groups are migratory they do not have the necessary papers and documents required by the Forest Department to file their claims. Since they migrate to different places they are unable to make a representation as a group in their home villages. There are almost no suitable examples of migratory pastoralists having secured grazing rights in forest areas although several pastoralists have depended on forests for countless years. This in turn has led to several pastoral groups wanting to be grouped with the Scheduled Tribes as they believe they have a better chance of their rights being recognized.

Contested Landscapes

“Wastelands” is a medieval term from British history denoting lands which could not be taxed (Ramdas & Ghotge, 2006). Typically these were lands which could not be brought under cultivation and were not under forest. They were also the lands used by pastoral communities to graze their animals. However, these lands are no longer considered waste as modernity and technology have brought in new uses. Today they are contested spaces as new land use patterns emerge. New and renewable energy in the form of solar (Jaisalmer), wind (Jaisalmer) Kalpavalli (Andhra) and biofuel farms (Rajasthan) are being set up in these lands. In some areas, infrastructure projects such as roads, institutions (Amritmahal Kaval in Karnataka), airports (Goa, Pune) are replacing grazing tracts. Industrialization in the Kutch has given birth to several new factories which prevent herds of camel from accessing the mangroves to graze. Irrigation canals in several parts of the country have disrupted the migratory routes of livestock forcing pastoralists to take long and circuitous routes. Not all these

projects are compatible with the grazing of large herds of animals. As grazing lands get bisected, flock sizes of pastoralists shrink, the pastoral group divides into smaller groups which in turn look for new grazing pastures. Socially, this creates several new problems as the cohesiveness of the group is then broken.

Towards an Inclusive Policy for Pastoralists

The perceptions about pastoralism are changing, albeit slowly. The emerging new world of free markets while depressing wool prices has created new opportunities for mutton especially free-range mutton. The organic movement wave has increased the demand for manure and dung from livestock. Pastoralism and livestock breeds reared by pastoralists have proven to be resilient, flexible, disease resistant, drought tolerant and their genetic material are sought by scientists and researchers. The indigenous knowledge of pastoralists has found acceptance and value to a limited scale. Even the skeptical wildlife conservation lobby has slowly begun to value the grazing services provided by migrating herds. So it appears that pastoralism has a future despite the larger stranglehold of state and international policies and politics. Pastoralists themselves have mixed opinions of the future. While on one hand they admit that their lifestyle is fraught with hardships, risks and uncertainty, they feel that it is a profession which has a future as there continues to be a huge demand for goods produced by pastoralists – milk, meat, dung, wool and more.



Recommendations

1. Recognition for pastoralists and the production system as a viable, distinct and critically important one. There is a paucity of data on pastoralists, their animals and their productivity. This needs to be urgently looked at⁴.
2. Recognition of mobility as an essential feature of pastoralism and pastoral production systems. Barriers to mobility such as those between states should be addressed so as to facilitate easy movement of herds. Pastoralism mobility issues should be addressed in the same way that General Sales Tax issues are being addressed.
3. A clear identity for pastoralists and identification documents which enable essential services of health (human and animal) and education to flow easily to pastoral groups and their livestock irrespective of their location.
4. Livestock, forest, agriculture, land and revenue policies to be sensitive to needs of pastoral production systems. Existing policies to be reviewed and reworked so they are not antagonistic but supportive.
5. Pastoralists to be given secure access and rights to common pool resources in flexible and dynamic ways.
6. New infrastructure projects such as highways, dams, canals and railways to be sensitive to movements of pastoralists and their traditional migratory routes. Paths, tunnels, bridges to facilitate animal movement to be factored in. These may also facilitate wildlife movements and be of help to local sedentary farmers.
7. Recognition for services rendered to the ecosystem in terms of maintaining grassland and forest ecosystems and the biodiversity within, both floral and faunal. Mechanisms for suitable compensation for the ecosystem services to be worked out.
8. The migratory lifestyle is not without risks. Theft of animals, accidents to animals and humans and epidemics are frequent problems faced by pastoralists. Support systems to enable pastoralists to overcome these problems through risk cover, insurance and other support systems need to be worked out.
9. Pastoral livestock production systems can contribute to organic food production in several ways. Firstly, dung and manure can replace synthetic chemicals; secondly, other products like milk and meat can be organically produced. However, to achieve this there will have to be clear policies on organic livestock production developed at the national level which takes into account pastoral production systems.
10. A Ministry of Pastoralism should be created to take care of the special needs of this production system and the people who practice them.

⁴ *The Kullu Call* (May 2016); Life Network, Lokhit Pashu Palak Sansthan, Rainfed Livestock Network, League for Pastoral People and Endogenous Development.

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