Malhotra et al. Pastoralism: Research, Policy and Practice

https://doi.org/10.1186/s13570-022-00237-5

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Puhals: Outlining the Dynamics of Labour and Hired Herding among the Gaddi Pastoralists of India

(2022) 12:30



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Abstract

Pastoral practices throughout the world are in a state of flux, and Gaddi pastoralism in India's Western Himalayas is no exception. Often in literature and common parlance, these practices are predicted to end with the current generation of practising pastoralists. For Gaddi, an agro-pastoral community located in the hill state of Himachal Pradesh in India, these gloomy predictions have remained persistent over decades. Irrespective of these claims, pastoralism continues to remain a viable livelihood option for many within the community even today. However, the institutional dynamics in which these practices are embedded have undergone several changes. In this paper, we discuss the changes in Gaddi pastoralism and its resilience by stressing a critical aspect of labour, often referred to as *puhals* in their vernacular dialect. Out of the various contextual meanings, we adopt the applied translation of this term as hired herders to understand their role in the larger socio-ecological system amidst the on-going livelihood shifts and declining interest among the Gaddi youth to pursue pastoralism. The data presented in this paper was collected through ethnographic fieldwork conducted during 2018–2019 at Bharmour region of Chamba district in Himachal Pradesh, India. Qualitative tools including in-depth interviews, focus group discussions and participant observations were administered. We discuss various aspects of *puhal* practices among the Gaddis including their recruitment process, need for hiring, involved negotiations over remunerations, skill sets and access to the resources, to highlight the institutional dynamism. Our findings suggest that hiring herders remains a crucial adaptation for the continuation and sustenance of pastoral practices that are facing contingent external pressures. It also facilitates transmission of local knowledge, livelihood and income diversification, accumulation of wealth, social mobility and cultural continuity. We conclude that hired herding, in the face of increasing labour shortages among the Gaddis, offers an innovative proposition to halt the decline in pastoralism and shape its future.

Keywords: Puhal, Labour, Hired herding, Gaddi, Pastoralism, Socio-ecological system

Introduction

The future of pastoralism remains uncertain amidst the stress and shocks that pastoral livelihood practices confront on an everyday basis (Galvin 2009; Nori 2019a; Namgay et al. 2021). On the one hand, it is referred as a redundant occupation (Robbins 2004) that no more remains desirable because of increasing vulnerabilities and preference for a settled way of life. On the other hand, there is a growing body of evidence supporting it as a

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highly viable, sustainable and profitable livelihood option (Zinsstag et al. 2016). Irrespective of these divided opinions, the transitioning nature of pastoral practices, namely the institutional mechanisms, economic and cultural aspects and herding practices initiated by the new generation pastoralists, provides a common thread that connects pastoral contexts worldwide.

Pastoralism as a praxis is transforming due to the wider changes that the nation-states are undergoing in all interconnected domains of socio-economic, ecological and political environments (Galvin 2009; Hauck



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Labour in the pastoral production systems has not grabbed the same academic attention that it receives in agricultural systems (Scoones 2020; Turner 1999). But it remains a 'critical limiting factor' (Turner 1999, 292) in regulating and governing the pastoral practices to a great extent. Most of the recently available studies discussing pastoral labour remain confined to the African context where practices of absentee herding, entrustments and pastoral group ranches are commonly observed (Bassett 1994; Fernandez-Gimenez 1999; Little 1985; Moritz et al. 2015; Murphy 2015; Nori 2019b; Sikana and Kerven 1991; Turner 1999; Unusa 2012; Yurco 2017). Apart from that, a few other studies sporadically document the aspects of labour for nomadic pastoral groups in the Middle East (Beck 1980; Bradburd 1980), transhumant pastoralists in the European countries (Constantin 2005; Sendyka and Makovicky 2018) and migratory pastoral populations in Asia (Agrawal 1992; Rao 1995; Singh et al. 2020; Namgay et al. 2014; Namgay et al. 2021). This, by no means, is an exhaustive list of literature. Still, it remains substantial in representing the contextual and regionspecific processes of labour engagement, allocation and management within these intensive migratory pastoral systems.

Pastoral systems throughout the world are observing an expansion of such practices where the herd owners are not necessarily the herders themselves (Nori 2019b). Available literature reflects that, in most pastoral communities, labour was traditionally sourced from within the household or through social relationships (Little 1985; Köhler-Rollefson 2018b). However, with the increasing changes in the household and community organisations, political regimes, resource managements and market forces, this is transitioning. The existing trend that points towards the commoditisation and proletarianisation of pastoral labour (Constantin 2005; Nori 2019b; Scoones 2020; Unusa 2012; Namgay et al. 2014) also reflects the evolution of pastoral practices as well as the changing socio-economic conditions of the communities involved.

Outmigration and livelihood diversification within the pastoral households have also affected the aspirations of the community members, thereby generating a dearth of labour for pastoral herding (Tiwari et al. 2020; Aryal et al. 2014; Namgay et al. 2021; Köhler-Rollefson 2018b). Such a situation has led to different consequences for the pastoral communities across the globe that can be broadly consolidated into the following outcomes: one, where pastoralists are gradually pushed to abandon the livestock rearing occupation in the absence of helping hands while they take up other livelihood options, and the other where they adapt and strategise through various means to keep the pastoral practices alive. Hiring herders is an example of such a strategy (Bassett 1994) that enables pastoralists to cope with the emerging labour shortages. It is commonly perceived that labour exchange in pastoral arrangements happens between the capital/resource-intense households and labour-intense households (Beck 1980; Hauck and Rubenstein 2017; Rao 1995). Therefore, the fluctuating dynamics between capital and labour create the conditions for the demand and supply of hired herders. However, this formalist economic explanation of pastoral labour fails to capture the traditional arrangements, which operate on essential socio-ecological reasoning. We argue in this paper that the pastoral livelihoods largely depend on socioecological drivers rather than having a pure economic motive behind them, and that this makes them resilient and dynamic in nature in face of systemic transitions. When we add the socio-ecological angle to our analysis, institutional practices like that of hiring herders become essential in keeping the pastoral sector functional and adaptive (Turner 1999).

In this paper, we present the case of one such community, the Gaddis of Himachal Pradesh in India, and focus on their institutional practices of hiring herders. Gaddi¹ is a traditional agro-pastoral community residing in the western Himalayan region, mainly in the Chamba and Kangra districts of Himachal Pradesh in India. Gaddis have profound historical and religious links with the sheep and goat rearing practices. Within the larger purview of Hindu mythology, Gaddis believe that Lord Shiva, the creator of the universe, has delegated them with the task of animal husbandry in which lies their cultural pride as well. Traditionally, the division of labour within the Gaddi agro-pastoralism is based on the community-specific gender roles as men are responsible for seasonal migratory pastoral practices, while the women look after the subsistence agricultural affairs throughout the year. Gaddi pastoralism observes a vertical transhumant seasonal migration pattern across the altitudes. They usually follow the fixed migration routes

¹*Gaddi* is a constitutionally recognised Scheduled Tribe community in Himachal Pradesh, India, while the term *Gaddis* is used to refer to the people from the community

that have been carefully trodden by the community elders keeping the customary pasture resources, home villages, markets, medical and shearing facilities at approachable distances.

Gaddi agro-pastoral practices remain temporally and spatially regulated with the change of seasons as they periodically transcend from the higher alpine pastures of Lahaul to the lower foothills of the Dhauladhar range and the adjacent agricultural fields across the region in Himachal Pradesh and in the adjoining state of Punjab. The constant migration across the elevations, a large number of small stocks to manage and a need to manually carry the camping luggage make Gaddi pastoralism physically a very intensive occupation. Along with that, it involves prolonged isolation periods away from home and in the wild that demands high levels of mental and emotional stability. The demanding nature of this job, apart from the external pressures, also includes dealing with the changing weather conditions, negotiating with the settled communities and traders, medical emergencies and natural calamities makes it a tough livelihood choice, more so, in the current times when the development discourse of modernity and urban lifestyle promoting sedentarisation is heavily imposed by the authorities and gradually internalised by the community members (John and Badoni 2013; Malhotra et al. 2021). Following this, a shift in the aspirations of the educated youth of the community who are increasingly shunning the migratory lifestyle that is perceived to be devoid of a sense of stability, personal hygiene, social dignity and public status is creating a huge void in terms of labour. Similar instances have been recorded for other transhumant pastoral communities in the adjacent Himalayan regions where labour shortages because of education and outmigration are resulting in a decline in pastoral practices (Namgay et al. 2021; Namgay et al. 2014; 2013; Aryal et al. 2014; Tiwari et al. 2020; Banjade and Paudel 2008). To cope up with this deficit, Gaddi pastoralism has seen an upsurge in the recruitment of hired help, which in the local parlance are known as *puhals*.

Hiring a *puhal* in the Gaddi pastoral system has been a common traditional practice for ages. However, its connotation and praxis have gradually shifted and evolved over a period of time. The available literature that scantily documents the *puhal* institution gives us a reference frame to elaborate on these practices and understand it by using a lens of continuity and change. This theoretical idea, where oscillation between continuity and change is used to focus on the persistence, adaptation and resilience of the system (Jandreau and Berkes 2016), provides us a critical analytical frame that helps interpret the *puhal* practices in Gaddi pastoralism. It further helps to develop an understanding of how social institutions transform spatio-temporally by adapting to the emerging needs while enabling the system's

continuity. The study unpacks the following questions on who the *puhals* are in the Gaddi pastoralism, and how, why and by whom are they recruited. These questions largely help in qualitatively outlining the evolving significance of *puhals* for the Gaddi pastoral socio-ecological system. Attempting a quantitative or statistical analysis of these trends was challenging due to the lack of formal data at various levels, as well as the informal practices that kept the pastoral practices going on.² Borrowing from Ostrom's framework of the Socio-ecological system (SES), we situate the *puhals* in Gaddi pastoralism not only as a significant set of actors that influence the working of the local SES, but also as the drivers of the conditions for change.

We aim to contribute to the existing academic discourse that, at the moment, remains swamped with the arguments of uncertainty about the future of pastoral practices. Studies documenting instances of hired herding in Indian pastoral context remain devoid of an indepth discussion on the hiring processes, their relevance and the future of such practices. The assumptions around non-engagement of herders outside the social sphere in India's traditional pastoral setups could be behind such a lack of focus. However, a more plausible explanation could be that pastoralism in India has always remained an ignored domain of inquiry (Agrawal and Saberwal 2004; Sharma et al. 2003). Only a handful of studies (Agrawal 1992; Köhler-Rollefson 2018a; Rao 1995; Singh et al. 2020) emphasise on practices of hired herding in India. These studies delineate the institutions of hiring herders in traditional setups often recognised by the vernacular terminologies like Gwala among the Raikas (Agrawal 1992) or Ajri among the Bakarwals (Rao 1995). Saberwal (2003) in his study on the shepherds of Himachal Pradesh also hints at the existence of such practices. Another recent study by Singh et al. (2020) examines the hiring of immigrant labours for the pastoral work in Spiti valley and raises concerns regarding the loss of traditional knowledge as well as the local grazing resources. These studies collectively provide a comparative base for our current work on puhals in Gaddi pastoralism.

²Gaddi pastoralism remains scattered across a larger region falling in the western belt of Himalayas, making it difficult to reach at an exact estimation of practising pastoralists. In addition, there exists no supporting documentation except the grazing permits issued in the name of Gaddi pastoralists. Oftentimes, permits are circulated within kin networks or are even informally leased, which goes against the legal norms. As a result, many people usually refrain from directly discussing these issues, making it difficult to estimate the exact number of practising pastoralists and this is more so in the case of hired labourers. Therefore, clearly stating a number has a possibility of data misrepresentation. This is also because of the informal dynamics involved in the process of hiring based on the seasonal and need-based flexibility exercised by the Gaddi pastoralist communities.

From our analysis, we infer that the practices as that of hiring *puhals* essentially provide an alternative for the survival of Gaddi pastoralism by generating new passages for knowledge transmission, accumulation, social mobility and cultural continuity. We do not intend to ignore the significant changes that hired herding may bring in terms of ecological impact on grazing resources (as highlighted in few studies, including Singh et al., 2020; Turner, 1999; Namgay et al. 2013), but our primary focus remains on understanding the nuanced socio-cultural practices catering to the continuity of pastoral lifestyle and occupation. Additionally, a quantitative estimation of these transitions could be taken up by future studies to substantiate the trends reviewed here.

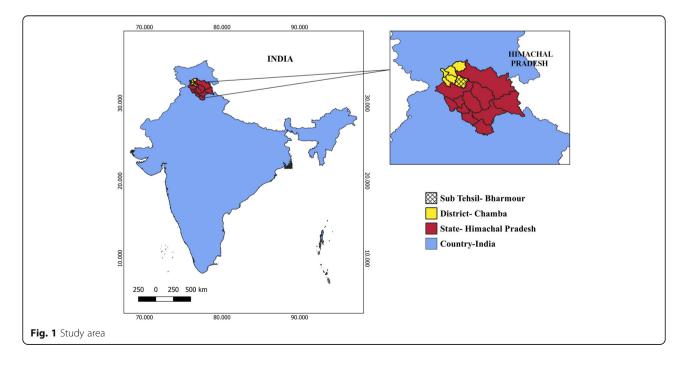
The following sections in the paper are arranged to provide methodological details and an elaborate discussion on the various aspects of hiring *puhals* to understand the contextual variability and emerging theoretical underpinnings of such practices. In the end, we sum up the findings from Gaddi pastoralism to draw conclusions that could inform the significance of such practices in other pastoral contexts as well.

Research context and methods

The current study is an outcome of an ethnographic fieldwork conducted in phases during 2018–2019 at Bharmour in Chamba district of Himachal Pradesh, India (Fig. 1). This work was part of a broader research project that aimed at understanding the socio-ecological transitions in transhumant pastoralism of Gaddis using ethnographic qualitative research methods. Although the population practising pastoralism currently inhabits

other parts of the state as well, Bharmour, which is acknowledged as the native homeland of the Gaddis to where they trace back their ancestral roots, remains the focus of this study. Based on the data collected from this region, we trace out the long-term dynamics in the institutional practices around hired herding. A multi-sited approach was adopted under which villages within the administrative boundaries of Bharmour that were dominantly inhabited by the Gaddi population were visited. As the focus of the study remains to comprehend the institutional practice of hired herding, we used a convenience sampling method to select our research participants that included the members of the community who are or have been in any way related to the pastoral occupation. A due consent, either in verbal or oral terms, was obtained from all the research participants.

Sources of data majorly include 35 in-depth and semistructured interviews and five focus group discussions that were conducted with the members of the Gaddi community, which included practising pastoralists, expastoralists, members from the pastoral households and puhals. Interviews with all the major officials including Chief conservator of forests, Range officer, Block officer and forest guards appointed in the local branch of the state forest department complement the collected information. Apart from that, contributions from multiple informal conversations with the Gaddis and participant observations carried out during the fieldwork enrich the data presented in this paper. To organise and interpret the collected data, a thematic analysis was performed that highlights several themes as discussed in various sub-sections below.



Puhals: Hired herding practices in Gaddi pastoralism

Who is a Puhal? How are they hired?

A puhal within Gaddi pastoralism can mean different things in different contexts. In the available literature, puhal are interpreted as herding assistants (Kapila 2003), servants (Phillimore 1982) or hired shepherds (Axelby 2007; Bhasin 2013). However, in common parlance, *puhal* invariably refers to anyone who herds. Etymologically, it comes from the Hindi word *paal* or paalna, which means 'to care' or 'look after'. Therefore, in literal terms, puhal would mean somebody who takes care of or manages the livestock. In praxis, puhal is simultaneously used to address a herd owner, a hired herder, an absentee herder, or even exherders at times. This category is gender restricted and only limited to the men who render their services for pastoral activities. However, the term of reference varies according to the age and wealth status of the herd owner. A person with a substantial number of livestock as his wealth and older in age is addressed as a bada puhal (literally meaning a big-herder) and anybody with a smaller flock with 10-50 livestock or who is relatively younger in age is referred as a chota puhal (literally meaning a small-herder). These categories within the Gaddi social milieu remain flexible and inclusive. The same terms are often used in relation to the ownership of the grazing permits or even to denote the years of herding experience a person has

Across the intersectional differences that the term puhal represents, we operationalise it as a hired herder who assists the Gaddi herd owner, sometimes called as *bad-dhaniya*³, in managing his day-to-day pastoral activities. Traditionally, puhals are hired from within the Gaddi community or from the other local communities residing in the region that have some pastoral background. Any Gaddi pastoralist who needs a helping hand for managing their herd spreads a word within their expansive social network to look out for the availability of men. This social network not only comprises of kin and agnates as is traditionally perceived but also includes fellow herders from the same community in the same village, or even the herders from other villages who frequent the same migration routes and pastures. Finding a puhal is facilitated through acquaintances and social links generated during the pastoral journeys across the ecological terrains and social landscapes. These informal networks that spread across the pastoral and nonpastoral communities are traditionally maintained over generations and across geographical distances through mutual reciprocities of different kinds, including exchanging goods, services, knowledge and information. Contemporarily, the usage of technology like mobile phones and the Internet are used to coordinate these networks, making the process of spreading and seeking information easier.

One of the young Gaddi interlocutors from a pastoral household informed about the process of hiring a *puhal* through the following analogy:

Pastoralist's networks are just like social media platforms where one puts out an advertisement asking for a puhal. People then can make suggestions if they have any reference. Puhal can be a relative, a friend of a friend or any other acquaintance who is actively looking for employment.... As pastoralism is not an activity that can be carried out in isolation, it requires formations of groups, pooling of livestock, sharing of labour and resources, and collectively looking out for each other whenever required. Puhal requirement is one such instance where you can count on your networks and informal relationships to fulfil the void that shortage of labour within the households generates. (Field Data 2019)

Traditionally, *puhals* are the community men who seek employment by exchanging their labour within pastoral arrangements. The label puhal, although representing a lower social status and economic dependence, is not traditionally considered as patronising (Phillimore 1982). However, with the gradual decline in pastoral activities within the community, becoming a *puhal* is no longer favoured. In general, puhals are appointed out of need, but there are instances where their recruitment can result from other social interactions, including familial obligations and marriage alliances. Kapila (2003) and Phillimore (1982), in their work on Gaddis, have documented a traditional practice in which a bridegroom becomes a *puhal* for his father-in-law. This used to be a common practice in the households with only daughter where the son-in-law in exchange of his labour for the bride service used to inherit the livestock wealth of his father-in-law. Moreover, Gaddi folk songs and legends also highlight the desirability of *puhals* among the community women as potential partners because of their physical endurance and ability to fetch milk, wool and other necessities for the household (Verma 1996).

³Among Gaddis, livestock is perceived as *dhan*, which literally means wealth and anybody with substantial number of livestock that determines his social status and rank within the community is referred as *Bad-dhaniya*.

Why is there a need for puhals?

Gaddi pastoralism has always remained labourintensive as they practise vertical transhumant migration that involves crossing different altitudes, agricultural sites, and rugged terrains. Moving with the flocks of sheep and goat across the mountains has always remained a group activity for Gaddis, requiring many helping hands for various day-to-day activities. Thus, employing *puhals* has remained a traditional practice to supplement one's camp with additional labour. However, the need to hire a puhal has increased manifold with the declining desirability to carry out pastoralism among the educated youth of the community who seek city jobs after completion of their higher education. Apart from that, specific government-run programmes including MGNREGA⁴ also affect the availability of local pastoral labour. Many Gaddi men and youth from the pastoral households now prefer working as a daily wager in their village's vicinity from where they can go back home every day and avoid the difficulties of migratory pastoral life.

'Instead of working as a migratory pastoralist if we are working as a wage labour in the village, at least we get to sleep under our roof, eat proper meals and meet our family every day' said Diwan, an ex-Gaddi pastoralist who left the profession almost 5 years back and currently is working as a daily wage labourer in the public welfare department's road construction project under MGNREGA. The decline in the availability of local labour is also leading to an inflow of migrant labour from outside the district and the state. Cases were reported where the *puhals* were from the nearby state of Uttarakhand or were even as far as from Bihar (Kapila 2003).

Puhals are in constant demand to manage the existing flocks despite an overall decline in pastoral practices in the region. Employing a *puhal* depends on many factors such as flock's size, seasonal variations in availability of resources, livelihood diversification, shortage of labour within the household and a combination of other exigencies. These factors remain applicable for both the Gaddi herd owner to hire a *puhal* and for the *puhal* to seek employment. In many cases, *puhals* are employed by the elite Gaddi pastoralists as assistants, servants or additional helping hands to manage their large flocks. But when the *puhals* become trustworthy and serve for longer durations, it is not uncommon for the Gaddi pastoralists to gradually convert into the absentee herd

owner. As one the Gaddi pastoralists from Sachuin village articulates:

I have got a large flock and my health doesn't support the migratory shepherding practices anymore. For the upkeep of my herd, I have hired two puhals....one of my employed puhal has been with me for as long as 14 years. I can trust him with my livestock. (Field Data2019)

It is to be noted that within the Gaddi pastoral practices, hired herding is not restricted to the elites and large herd owners alone. In our field observations, we encountered several small herd owners with limited livestock (not more than 100–150 headcount) who regularly employ *puhals* depending upon the contingent needs and their capacity to bear additional labour costs. These employments are seasonally renewed when the herd owner needs extra labour to manage his flock's migration or to take out time to diversify his economic pursuits.

Every winter, when we have to go down to the plains in Kangra and adjoining districts, we need extra men to look after the herd. At that time, we employ puhals, who have small herds of their own or are just looking for employment as labour.... we either pool in two-three small herds together for our convenience or hire a puhal with no livestock of his own on a wage basis. It has become a need to hire a puhal during these days to save ourselves from paying hefty amounts of fine to the settled agriculturalists for any damage that our livestock might cause to their crops. We also need to be very careful in protecting the plantation that the forest department has done here and there near the roads. Apart from that, we have to protect our livestock from eating poisonous grass⁵ that remains widespread in that area. During winter migrations, livestock rearing requires almost double the labour as it does in summer months. (From an interview with a son of a practising pastoralist, Field data 2019).

It is clear from the above situation that hiring a *puhal* not only is restricted to the elite herd owners but also is emerging as a necessity to continue transhumant pastoralism amidst the external challenges that are either the consequences of shifts in agrarian practices of the region or are policy driven (Ramprasad et al. 2020). It is

⁴MGNREGA stands for Mahatma Gandhi National Rural Employment Guarantee Act, 2005, under which wage employment is generated through the village-level Panchayati Raj institutions in India. It guarantees to provide 100 days of annual employment to the adult members of the rural households in and around the village.

⁵*Lantana camerata*—an invasive unpalatable shrub that has seen an increasing growth in the winter pastures of the Gaddi pastoralists in Kangra and nearby areas (For more details refer Ramprasad et al., 2020)

observed that the settled Gaddi population located in the region is increasingly shifting to crop cultivation, mainly in their winter homes at Kangra and to horticulture at their villages in Bharmour (Malhotra et al. 2021). A duality in the residence and livelihood practices thus plays an important role in determining the labour dynamics within Gaddi pastoralism.

There remains a need for hiring a *puhal* when a Gaddi herd owner who has already diversified into other livelihood activities is interested in keeping his herd intact. In such a scenario, livestock are entrusted with other practising pastoralists, who then serve the role of *puhals* for the herd owner irrespective of their own herd size. All the livestock are pooled together, resources are shared and *puhals* are paid for the upkeep of the owner's share. In such cases, livestock rearing remains a secondary occupation for the herd owners through which they source the additional income as well as other pastoral byproducts that hold cultural and ritual significance including wool and rams for sacrificial purposes. The rationality and profitability of such arrangements remain out of the scope of this paper. However, in these cases, the relationship between the livestock owner and the *puhal* is not of subservience but more of an obligation.

Additionally, we also observe smaller herders collaborating with the bigger herders as they become *puhals* for the latter. In such cases, a *chota puhal* with a small herd of his own joins the herd of a *bada puhal* by trading his labour. Reasonings for such an exchange range from the non-viability of small herds to the unavailability of grazing permits. Axelby (2016) discusses a similar instance in his paper where he observes small herders pooling their livestock with a bigger herder. Through these means, smaller herders negotiate access to grazing resources under the legal protection of the bigger herder's formal grazing permit. Smaller herds in the transhumant system like that of Gaddis are expensive to manage, and herding alone is challenging both in terms of labour and unforeseen conditions of migration. Therefore, small herders, many a time, join the bigger herders where they pool their animals together and get paid in exchange for their labour. Such recruitments of *puhals* are only possible when the bigger herd owner has a scope for accommodating the additional livestock on his grazing permit, even if the legality of the document does not allow so. It can be understood through a situation that one of the interlocutors explained as:

Dharam Chand has a permit that allows him to graze almost 500 livestock. But currently he has a herd size of 250-300, that allows him to share his grazing permit with small herders. Chote puhal (Small herders) with 50 to 100 livestock of their own who do not hold any permit can join his herd and pool their livestock together. This would give them a legal access to the dhars (grazing grounds) under his permit and Dharam Chand, some additional labour in the form of puhals. (Field data 2019)

Apart from the above-described situations in which hiring of *puhals* remains definable, there is a possibility of many other complex arrangements within the Gaddi pastoralism where the recruitment of *puhals* occurs depending on the evolving needs and situations.

We need to look for puhals when we do not have enough helping hands at home. After my father stopped migrating and my brother joined the army services, I was the only one left to look after our herd and I couldn't do it alone. I had to hire puhals for maintaining our herd and getting some time out to look after our agricultural fields in the village. During summers, puhals take care of the livestock as they remain in the nearby pastures, and I work on my fields here in the village. I visit them regularly, but it doesn't require my constant presence. Whereas, during winters, I accompany the herd and puhals downhill, as there remain high chances of deceit and theft. (Interview data from a practising Gaddi pastoralist from Kugti Village in Bharmour, 2019).

Recruitment and negotiations

Hiring a *puhal* in Gaddi pastoralism is performed majorly through informal oral contracts. There are no legal procedures or written codes of conduct involved as everything is decided based on trust and word of mouth. The faith vested in these informal linkages provides confidence to hire a stranger who is gradually tested for herd management qualities. He needs to be physically fit and mentally strong to carry out this difficult task that involves walking across the altitudes and sustaining a prolonged isolation period. There are no fixed rules to judge a *puhal* during recruitment, but his abilities are tested over time.

A *puhal* can enter Gaddi pastoralism with no livestock and almost no knowledge about herding, or he might have a small herd of his own. Depending upon the levels of expertise, pastoral background and number of livestock owned, terms of employment and remunerations for *puhals* are determined. A *puhal* as an apprentice with no herds of his own undergoes different negotiations with his employer than that of a smaller herder joining a bigger herder. Remunerations are also subjected to what a *puhal* aims at achieving by exchanging his labour. Usually, puhals are paid in cash and livestock both. They are given some amount like 5-10 thousand rupees and one sheep per month. Goats are not given generally, but he might ask for one or two of them in a year. Following this, by the end of the year, a puhal will have almost 12 sheep of his own. He can keep the sheep within the flock that he herds for his employer or can sell them off to make money. If he continues over the years, he can accumulate more livestock and build his own flock. Or, if there is an urgent need, he can exchange it for cash. (An expastoralist from Bharmour, Interview data 2019)

The general terms of employment are discussed before a *puhal* joins the herd, but it remains open for negotiations over time. Word of mouth in such contracts carries immense value, and the oral agreements are held solemnly. Hired *puhals* are entrusted with the herds and their daily maintenance needs but are not handed over the decision-making authority of selling and buying the animals and changing the migration routes. They enjoy limited autonomy in day-to-day activities as the owners use various surveillance mechanisms to keep a check on them. In most cases, Gaddi pastoralists accompany their puhals during migrations, especially during the winter journeys when chances of thefts in the low-lying plain areas are high. It remains crucial for the herd owner to be present during critical phases of the grazing cycle to avoid conflicts and thefts and to maintain smooth transactions (Kapila 2003). In addition, supervision is necessary to adequately train and upskill a puhal.

If a *puhal* is new to pastoralism, he cannot be expected to take charge of all the activities that remain crucial for maintaining a herd. Anyhow, migratory pastoralism is not an individual's enterprise. Among Gaddis also, traditionally the herds were jointly owned, and the men of the *shareek* (an extended family) used to take turns to look after them. With the disintegration of joint families and the emergence of nuclear households, the inadequacy of pastoral labour has led to a decline of pastoralism. In some households, where it remains a common livelihood practice, sharing of labour within the *shareek* still continues.

In the case of migratory pastoralism, herding is a round the clock job. Herds cannot be left alone and require continuous monitoring. Deputing a *puhal* reduces the workload of herd owners who then often return to their villages to look after agricultural fields/ orchards or be with their families. Sometimes *puhals* are also relieved from their duties and are given a short break. This arrangement helps both the herd owner and the *puhals* to take time out and pursue other agriculture-related duties. Ranging from recruitment to assigning the work-load, *puhals* undergo a series of negotiations that depend on the changes in locations, seasons, nature of resources among the other factors.

Transaction costs and remunerations

Puhals in the Gaddi pastoralism are hired under various conditions to secure pastoral labour for both economic and cultural reasons. Apart from other implications, hiring *puhal* results in an increase in the transaction cost involved in livestock rearing for the herd owner. With the employment of external labour, a Gaddi pastoralist must pay the wages and look after the daily needs of the puhals while also making his own living out of herding activities. A herd owner is responsible for puhal's food, clothing and other necessary items that he needs to carry along during migration cycles apart from the prenegotiated monthly wages and number of livestock he would receive in exchange for his annual labour. Hiring a *puhal* does not always translate into capital gains or even a growth in the herd size for the herd owner. But it majorly supplements the labour that remains crucial for managing the existing herd and diversifying into other occupational activities.

An old Gaddi man from the Sachuin village in Bharmour, with years of experience in pastoralism, has stopped migrating with the herds because of his old age and has hired *puhals* to look after his livestock. In such a practice, he has become an absentee herder who now exercises his control on the herd as well as on the farflung grazing resources through the agency of his *puhals*. These *puhals* migrate yearlong with his herd of almost 200 livestock and are paid both in cash and kind annually. His nephew (a distant kin), who has a herd of his *own*, keeps a check on his *puhals* every now and then. He reports:

I have to pay the puhal both in cash and livestock. The cash payment goes up to some 1-1.5 lakh per year, depending upon the settled agreement beforehand. Along with that, I have to arrange for shoes, food, clothes and blankets for my puhals that they need during migration. All this adds a lot to my expenditure, but it remains unavoidable to maintain a herd. In order to keep my livestock in good health, I need to make sure that my puhals are doing fine. (Field Interview, 2019).

Hiring a *puhal* limits the profits that a Gaddi herd owner makes from the pastoral activities. According to Beck (1980), hiring herders is profitable when the owner has multiple herds and profit margins are higher. Hiring results in cutting down a good amount in the form of wages paid to the hired herders from the herd owner's net household income (Beck 1980). In the case of Gaddis, we observe that *puhals* are not solely recruited with profitability purposes but have become a need of the hour to sustain existing pastoral practices. Herd owner's socio-economic status does play a role in hiring a *puhal*, but it does not remain the sole criteria as illustrated for some African contexts (Beck 1980).

Resource access, rights and permits

Based on our findings, we argue that a choice to become a *puhal* does not necessarily come from the economically disadvantageous position but is also grounded in a lack of legal access to resources. In Himachal Pradesh, Gaddis, who have been traditionally continuing the agro-pastoral profession, have customary rights to the seasonal grazing grounds (called *dhars* and *jungles*) at different locations recorded in the forest settlement reports. Based on these reports, the Forest Department (FD) issues them a renewable legal permit that secures their access to the state-owned resources and migratory routes while also capping the number of livestock they can rear in their migratory herds. All the Gaddi households do not possess this document as many of them either practised pastoralism under the elite pastoralists in the past or did not even practise it at all during the time when the forest settlement in the region took place. According to the field interviews with the forest officials, permits issued document the customary usage and rights over pastures that have remained unchanged for several years. These permits are inheritable but not transferable. State's FD issues no new grazing permits now and only renews the old ones every 2 years after collecting the due grazing fee from the pastoralists based on the headcount in their herds. This, according to them, puts a check on the number of pastoralists who depend on forest resources while restricting the entry of new people into the resource system. However, as explained earlier, these institutional regulations are negotiated using various informal mechanisms that enable sharing of permits and grazing grounds. Hiring of puhals remains one such tactic, which is increasingly becoming significant for the continuation of Gaddi pastoralism amidst the mounting resource-related challenges.

A rite of passage: Knowledge transmission and training

Puhals in Gaddi pastoralism are mostly perceived as apprentices or servants that help the herd owner look after their flocks. They are vested with management responsibilities of the livestock herds and the temporary camps known as *dera* on their migratory routes. *Puhals*, depending upon their age, the number of the livestock they add to the owner's herd, the status of their customary rights, prior experience and/or merely their purpose of joining as a *puhal*, are entrusted with different roles and responsibilities. Ranging from cooking, fetching water, caring for the new-born and ill livestock to carrying the

luggage and keeping the herd together, *puhal* must learn multiple tasks involved in migratory pastoralism.

Herding a flock of hundreds [of animals] is not an easy task. One cannot just become a puhal in a day. He needs to be physically and mentally active and emotionally strong. He has to walk long distances with the luggage on his back and new-borns [lambs] in his pocket. Sheep and goats can go anywhere, bringing them back and directing them on the busy roads needs physical strength and training. Not everyone can do that. Not everyone can even count how many livestock are there in one herd, let alone manage them. You have to learn it all through practice. (Son of a practising Gaddi pastoralists, Field Interview 2019)

Becoming a *puhal* is a process that involves rigorous training and acquisition of specialised skills that one learns either by carefully observing or through apprenticeship. Traditionally, in the Gaddi community, the sons were expected to accompany their pastoralist fathers during migration and learn pastoral skills through experience. However, with the incoming of formal schools and awareness about education, it did not remain a common practice. Education played an important role in changing the labour relations within the household and even within the community. The same has been the case with intergenerational knowledge transfer and apprenticeship.

Aman, a young Gaddi boy from the pastoral household, is a graduate in economics and works as a statistical officer in a government office. He foresees no future for his father's herd as both he and his younger brother, who is currently in college and aspires to be a civil servant, will not be pursuing pastoralism. His father, who is already in his late 50s, is continuing the transhumant pastoralism with the help of a *puhal*, who owns a small flock of his own. As he ages further and finds himself incapable of moving long distances, he would have no option but to sell off the herd. According to Aman, puhals remain integral for those Gaddi households where next generation remains unable to take up pastoral practices. He perceives that the increased profits and the general unemployment are attracting many nonpastoralists to become puhals. However, he feels that not everyone is readily equipped and knowledgeable to take it up as a livelihood. In his words:

Puhal needs to be trained thoroughly. It's like joining a new office. When I joined my job, I didn't know what files were kept where. I didn't know where to find the data. It took me some time to figure out the file numbers and get acquainted with the type of data we use in our office. I never read that before in the books. It all came through experience and especially through the help I received from my colleagues. The same goes for puhals. They learn step by step how to identify their livestock from the rest, how to guard them and keep them healthy, how to herd them by using different signals and sounds, what fodder is good and what is poisonous. It's a long and a-time taking process. (Field Data 2019)

The learning curve involved in becoming a *puhal* also includes the need for formal education to deal with bureaucratic formalities involved in everyday pastoral practices. The process of hiring a herder which otherwise seems to be just an agreement augmenting the availability of labour within pastoral settings goes much beyond the economics of the system. Apart from the inherent physical endurance and understanding of certain legalities, a *puhal* also needs to acquire local traditional knowledge on various aspects of pastoralism, which includes animal caring, identification, birthing, flora and fauna on the migration routes, health and disease prevention, to list a few. A *puhal* thus must undergo a rite of passage to become an efficient herder, which seems to be embedded in the domain of knowledge transfer through practice-based learning and apprenticeship.

Discussion

Hiring a herder remains prevalent among many pastoral communities spread across the world (Nori 2019b; Nori and Scoones 2019; Rao 1995; Scoones 2020; Namgay et al. 2014). However, how these practices materialise in terms of recruitment, payments and management remains contextually variable. The hired herding tradition, as demonstrated through the institution of *puhals* among the Gaddis of Himachal Pradesh, provides an essential insight into the status of pastoral practices in India. Our findings suggest that a range of reasons such as household labour void, need for extra help during seasonal pressures, livelihood diversification, herd growth and continuity of traditional pastoral practices stimulate the requirements for hiring a *puhal*, whereas employment and wage availability along with access to the grazing resources and an opportunity to accumulate one's own herd incentivize the puhals to adopt the pastoral practices. Hiring a *puhal* undoubtedly incurs an additional transaction cost onto the herd owner (Phillimore 1982) but it also essentially facilitates their pastoral livelihoods. Such practices remain integral amidst the escalating external pressures, labour shortages and dwindling pastoral practices (Farooquee 2010; Nori 2019b; Namgay et al. 2014).

Many factors, including the increased levels of education, outmigration and the myriad of challenges involved in herding are dissuading the next generations from taking up herding as a full-time occupation (Köhler-Rollefson 2018a; Namgay et al. 2014; Aryal et al. 2014; Namgay et al. 2013). This is resulting in increased vulnerability among pastoralists with an almost negligible generational renewal of labour (Nori 2019a; 2019b). Such a scenario creates a severe shortage of helping hands at the household level forcing many to give up their traditional pastoral profession or seek hired help outside their domestic sphere. It can be inferred that gradually the pastoral labour among the Gaddis is being hired from outside the kin and close social networks on a contractual basis. Similar instances have been observed for some other pastoral contexts across the world (Blench 2001; Kreutzmann 2012; Nori 2019b; Namgay et al. 2014). According to Blench (2001), Phillimore (1982) and Rao (1995), class and caste structures critically determine the hiring process but our findings fall out of line from this argument. The insights we gathered reflected on the newer trends of Gaddi pastoralists hiring puhals, which may not always have followed the caste and class logic. Based on *puhal* recruitment by the Gaddi, we interpret that the hiring of herders is emerging out of a dire need driven by labour shortages and variable external exigencies. The mounting ecological challenges leading to climate and resource uncertainties also play an essential role in influencing extra labour demands within the pastoral systems (Nori 2021).

Under the fold of hired herding different negotiations including labour contracts, entrustments and clientelism (Turner 1999) are carried out within the class-based societal structures. In literature, elite livestock proprietors or absentee herd owners are documented to employ the marginalised pastoralists to manage the migration of their flocks (Hauck and Rubenstein 2017). However, among the Gaddis, we observed that this is not always the case. Because of increasing resource fluctuations and external pressures, even small herders remain dependent on *puhals* albeit for a specific season. At the same time, reverse dependency of *puhals* on the herd owners to provide them with wages, livestock and access to resources also exist. From most of the instances discussed in the paper, we recognise that *puhal* as an institution not only works in favour of a rich or elite pastoralist but also happens to be a way-in for the small herders to secure a pastoral livelihood. The transactions under this institutional practice involve the exchange of labour, livestock, money, daily necessities, pastoral by-products and, most importantly, access to resources that indirectly foster the continuity of Gaddi pastoralism. Such an arrangement reflects the principles of capitalism which facilitates accumulation as well as investment in pastoral livestock and livelihoods (Scoones 2020; Unusa 2012). Entrusted livestock are often seen as 'revocable gifts' or

the wealth stores for the elites (Turner 1999) who have diversified their sources of income. The herding contracts imitate more of an employer-employee or a patron-client relationship where often the nonpastoralists and urban-dwelling populations investing in owning a herd at remote locations depend on hired labour for its maintenance (Little 1985; Scoones 2020). However, hired herders are not always bestowed with all the decision-making authorities. Many of the small herders take up the labouring jobs for the absentee owners to ensure the viability of their own herds. These dynamics hint at the transforming nature of traditional pastoralism where labour is becoming a commodity for exchange (Little 1985; Unusa 2012).

Apart from that, hired herding also remains vital for land and livelihood diversification. In agreement with the case of mountainous pastoralism as presented by Kreutzmann (2012), hired shepherds who do not possess livestock of their own carry out the pastoral work for the economically diversified proprietors who primarily practise settled farming and own sizeable agricultural fields. In such a case, a combination of hired herding and farming supplements the proprietor's household income as it supports their pastoral practices using their own agricultural fields. The diversification allows them to benefit out of seasonal grazing and penning of livestock on the fallow fields after the harvest season for manuring. While remaining ecologically desirable, it also generates additional employment for those who own neither the land nor the livestock (Kreutzmann 2012).

Hiring of *puhals* as a traditional practice in the Gaddi pastoralism operates on localised norms and rules that reflect the complex interplay between institutions and actors which in turn influence the functioning of a larger socio-ecological system (SES). Hired herding in its current form not only prevents the Gaddi pastoral SES from disintegrating but also widens the scope for even non-pastoralists to enter this specialised domain of livelihood despite the formal restrictions. It also remains an effective means of knowledge transference and succession in case of a lack of household labour. This process also secures the abundant local knowledge from getting lost in translation and enhances the adaptive nature of the pastoral systems through continuous relearning. Unlike the negative impacts of hired herding stated in a few studies (Singh et al. 2020; Turner 1999), hiring of puhal in the Gaddi context provides them with an alternative option for continuity and sustenance of pastoral livelihoods. Puhals are carefully inducted, trained and observed till they acquire the essential pastoral skills enabling them to make judicious use of the limited ecological resources, thus contributing to the continuance of a sustainable transhumant lifestyle and a valuable system of production in the Indian Himalayas.

Conclusion

Through this ethnographic qualitative study, we revisited the importance of developing an understanding of pastoral labour, which thus far has received inadequate coverage in theory and policy. We also intended to acknowledge the relevance of traditional institutional practices such as *puhals* that are contextually diverse and culturally rooted, in providing appropriate need-based solutions for the functioning and continuity of pastoral livelihoods. As experienced in the Gaddi context, labour relations remain central to suggesting possible interventions that could promote and safeguard the vulnerable pastoral livelihood strategies in other parts of the world as well.

Unlike peasantry, pastoral labour has remained neglected (Scoones 2020) despite being one of the most critical factors determining the functioning of pastoral socioecological systems. The practices of hiring herders have been traditionally followed among many pastoral communities for ages, but the way they are evolving and reshaping the pastoral systems is inadequately documented. Even now when pastoralism remains in a state of flux because of acute labour shortages, and hiring of herders is also rising (Namgay et al. 2014), attention towards these aspects continues to be sparse. Thus in this paper, we bridged this gap by discussing the *puhal* practices prevalent among the Gaddis, to highlight the relevance of evolving labour dynamics in understanding the transitions in pastoralism. We also addressed the paradox regarding the pastoral futures that are facing plausible atrophy on the one hand, yet on the other hand are heralded as viable and sustainable livelihood practice by the international organisations⁶. We highlighted the ways pastoralists are adapting in such turbulent times, by modifying their ways not only for the reason of economic advantage but also for their cultural and occupational continuity. The resulting changes in labour dynamics carry the potential for altering the whole functioning of the socio-ecological systems by creating new forms of agency and institutional practices. An increase in hired herding as observed across the contexts is one way through which the pastoral systems may be interacting with the changing dynamics of production and exchange in emerging global environments (Hauck and Rubenstein 2017). Such a scenario makes it crucial to explore the contextual, structural and functional dynamics of pastoral labour to understand the continuity and change in the overall pastoral livelihoods.

In the Indian context, where the livestock economy seems to be constantly expanding (Ramdas and Ghotge 2006), refocusing on pastoralism and the employment possibilities it generates remains timely as well as desirable. Within that purview, the evolving local institutional practices guide the ways in which economic diversification

⁶Refer https://iyrp.info/—a movement to organise an International year for Rangeland and Pastoralists in 2026, endorsed by FAO council and supported by several nations with practising pastoral populations.

within the pastoral households and employment for the non-pastoral households could be generated. Practices such as hiring a *puhal* indicate socio-economic transitions among the pastoral communities and the need-based and wage-based hiring of herders allow for the continuity and sustenance of pastoral livelihoods. Despite depending on the marginalised natural resources these innovative institutional practices are also providing livestock accumulation opportunities for the small herders.

In the absence of formal institutional and policy-based support, continuity of the traditional practices like hiring *puhals* ensures that pastoralism does not get squeezed out of the socio-economic fabric. It also ensures the diversification of income sources along with the reproduction of cultural practices and pastoral by-products. Despite the declining numbers of pastoralists and desirability among the youth that restricts generational renewal of labour, hiring herders from outside the household provides an alternative to keep the pastoral practices from withering away. Instances of long-term hired herding, absentee ownership and increased dependency on hired herders have a clear and strong transformative effect on the form and praxis of pastoralism.

Amidst the on-going shifts in pastoral labour and other crucial variables discussed above, there remains a lack of consensus among the scholars and the local pastoral practitioners about the future of pastoralism in India. Discussions on hired herding, to some extent, address the numerous claims and conjectures about this uncertainty and present an alternative to maintain the viability of pastoralism. However, the undesirable and unsustainable aspects of hired herding including the rise in transaction costs (Namgay et al. 2014) and negative impacts on ecological resources (Singh et al. 2020) caution us against overgeneralizing such arguments. Yet the positive inferences drawn from the Gaddi context push us to revisit and reformulate the discourse on disappearing pastoral practices in India and elsewhere. These emerging transitions in Gaddi labour dynamics, hint at the'remaking of pastoral livelihoods' (Yurco 2017). Therefore, from an ethnographic qualitative perspective, we conclude that the Gaddi pastoralism in India, despite undergoing a visible decline in its practice, seems to be effectively reinventing itself.

Acknowledgements

We would like to appreciate the constant motivation and support received from Rashmi Singh during the overall process of preparation of this manuscript.

Authors' contributions

AM collected, analysed and interpreted the qualitative data and wrote the manuscript. SN contributed to the study design and writing the manuscript. KSB provided the overall guidance in compiling the manuscript and editing it. All authors read and approved the final manuscript.

Funding

Not applicable

Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

This study is a part of a PhD research project approved by the institutional review board of the authors' affiliated institution. Due consent was obtained from all the research participants during data collection.

Consent for publication

No applicable

Competing interests

The authors declare that they have no competing interests.

Received: 20 December 2021 Accepted: 14 March 2022 Published online: 02 August 2022

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