

Land Use and Livelihood: The Case of Shifting Cultivation among the Kukis

M. Mangkholen Haokip

Shifting cultivation as the main source of livelihood framed the life-world of the Kukis in the hills of Manipur. The socio-cultural, politico-administrative, religious practice and most importantly the land use system have an intertwined relationship with it. Though shifting cultivation has been debated and invites stringent scrutiny in policy arenas, it withstands as the chief source of sustenance for many in the tropics and sub-tropics till today. Important debates on the questions of sustainability and environmental consequences of shifting cultivation are intrinsic to the land use system of the cultivators. This paper is an attempt to examine the practices of shifting cultivation vis-à-vis the land use system among the Kuki shifting cultivators through a qualitative analysis. It argues that the land use system, reasoned by their livelihood (shifting cultivation) and the notion of forest conservation is an ingeniously developed sustainable technique of their association with the rough topography over a long period of time.

Keywords: Livelihood, Shifting cultivation, Kuki, Land use, and Manipur hills

Introduction

Shifting cultivation¹ locally known as *jhum* is the dominant source of livelihood among the tribes or communities living in the tropical and sub-tropical regions of the world. In India, it is largely practiced by the tribes inhabiting the north-eastern hills, particularly in the hills of Manipur (Elwin, 1957; NITI Aayog, 2018; Reimeingam, 2017). It is the dominant mode of food production and the economic mainstay of many rural households (NITI Aayog, 2018; Michael, 2022:15). The Task Force on Shifting Cultivation set up by the Government of India, in its report of 2003, estimated a cumulative area of 1.73 million hectares under *jhuming* in Northeast India during the period 1987-97, based on the Forest Survey of India report published in 1999.² The area of shifting cultivation in Manipur for the year 2014-15 was reported as 1,35,000 hectares whereas, the shifting cultivation area in the wasteland atlas for the

M. Mangkholen Haokip is doctoral candidate at Centre for the Study of Law and Governance, Jawaharlal Nehru University, New Delhi - 110067. [Email: lenynkips@gmail.com]

year 2005- 06 is 85,220 hectares and 2008-09 is 47,163 hectares and Jhum area for the year 2017 reported by Manipur Remote Sensing Application centre (MARSAC) found to be 1, 22,147 hectares (Singh, et. al. 2017). This basically reflects this form of cultivation to be a dominant means of livelihood for majority of the hill tribes.

The concept of livelihood is intrinsic to the resource or assets from which people draw or accumulate their means of subsistence using different strategies. According to Robert chambers and Gordon Conway (1992:6), “livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living.” The sustainability of which depends on significant elements such as; resources, strategies, outcomes and institutional processes involve that mediate to achieve (or not) livelihood outcomes (Scoones, 1998:3). For shifting cultivators, their peripheral position amidst isolated forest tracts configures typical rural livelihood that is reliant on natural resources or forest environment (Scoones, 1998:6; Xaxa, 2008:104). This dependency encompassed not only their agriculture system, but also associated with reliance on gathering, domesticating animals, hunting and fishing (Michael, 2022:14; NITI Aayog 2018; Xaxa, 2018). Central to this is the traditional land use system, particularly agriculture and forestry mainly associated with subsistence cultivation and household consumption (Kipgen, 2018:111). Essentially, resource utility was based on subsistence mode of production rather than materialistic objective of surplus gain.

Jhuming is a “strategy of resource management” (McGrath, 1987) that suits the geographical realities of the tropics. The rough topographical landscape, bio-physical realities and primitive technology involve shape the practice as an adaptive strategy. This is based on the intuitive lived experiences of the cultivators over their long historical association with the environment. It is a predominant tropical land use system that exists within the bounds of bio-physical conditions and socio-cultural practices, sustaining subsistence of forest dwelling communities in remote and isolated areas. In the process of harvesting from their environment, they develop “symbiotic relationship” where the culture of the group/community is shaped by their environment, and human beings have an impact on their environment (Xaxa, 2008:104-105; Fernandes, 2003:246). This coherently explains the livelihood context of jhumias, where nature is seen as provider for sustenance which in the process shapes the culture of the community and therefore values its conservation. One cannot think of jhuming without abundant availability of land with forested area. Thus, we see a wide expanse of forest in areas where jhuming was practiced and this explicitly explains the rural imagination of subsistence with conservation.

In contrast to the sedentary agriculture of the valley, jhuming is characterised by; mobility with shifting or rotation of fields, no (or minimal) fertilisers or mechanical input, largely based on human labour and most importantly distinctive land and forest property relations (of ownership, rights and privileges) which are essentially understood as shared or commons of various forms. The differences unleash popular imagination whereby sedentary agriculture was thought to be ideal while jhuming is presumed to be destructive, environmentally unsustainable and wasteful of resources. The notion of the shifting cultivation as transient, unplanned, wasteful land use

practices, created the unfavourable policy environment, which often compelled the policymakers to ban shifting cultivation (Shaw, et. al., 2022:3). The argument that shifting cultivation is deleterious to the environment dates back to the middle of 19th Century (Shaw, et. al., 2022:3). The colonisers describe it as wasteful of resources, primitive in nature and environmentally unsustainable (Shaw, 1929). On the other hand, there are several others who have rejected critiques citing “limited understanding of the complex system that jhum supports; the jhum calendar, the practice of collective work and collective ownership of land (that maintains the egalitarian structure of society), mixed cropping that diversified food-grain choice and most importantly, self-sufficiency” (Das, 2006). The ‘need base’ or consumption oriented jhuming economy with the principle of ‘taking what you need’ without wanton destruction of forest is neglected. Moreover, there is limited understanding of the land use system (distinctive for each community) of the tribes which transcend beyond merely jhuming processes, but also shapes the nature of conservation.

Concurring to critiques government initiatives were aimed at eradication or substitution by creating an alternative land use or agrarian system through land and forest policies. Several programmes that prioritise horticulture, animal husbandry, terrace farming and sedentary agriculture were also introduced under the Indian five years plans. These were aimed at rehabilitation of the jhumias, largely to discontinue its practice. However, in recent years there is paradigmatic shift in policy contours from aim at eradication to intervention for improvement. The task force on shifting cultivation reported that, programmes to manage *Jhum* through land levelling, contour bunding and multiple cropping offer great opportunities for improving *Jhum* and therefore focus needs to be shifted from the total replacement of *Jhum* to improvement in the traditional practices (Report of the task force, 2010:48). In the northeast, attempt at interventions for improvement of Jhum through developmental projects have been initiated by several agencies. In the states of Nagaland, NEPED (Nagaland Environmental Protection and Economic Development) introduce tree husbandry and cash crops with support from India-Canada Environment Facility. In Meghalaya, Manipur and hill districts of Assam NERCORMP (North- Eastern Region Community Resource Management Project) implement several livelihood projects such as institutional building and microfinance supported by IFAD (International Fund for Agriculture Development) and NEC (North Eastern Council).³

The state Manipur is located in the far eastern corner of the country. Topographically the territory is divided into the hills and the valley which is synonymous with their agricultural system. In the hills inhabited by the tribes shifting cultivation was the dominant mode of food production with few terrace cultivation. While the valley inhabited mainly by the Meiteis practice sedentary wet rice cultivation. The Kukis of Manipur inhabit the contiguous hill territories (Shaw, 1929:11) and few urban pockets. The term Kuki generally refers to different tribes having socio-cultural and linguistic affinity.⁴ The Thadou-Kukis and the Mate tribes

tribes which constitute the populace of this study are included within the Kuki groups. Shifting cultivation is the main source of livelihood for the Kukis in the hills of Manipur. This is shaped by their rough topographical location, tropical climate, forest land cover, thin population and coherent knowledge on jhuming technology developed through their lived experiences. The earliest written accounts (the colonisers) mention the prevalence of its practice since early times (see, Shaw, 1929; Shakespear, 1912). It is supplemented by hunting, foraging, fishing and gathering which are constitutive of the larger livelihood networks or system. The substantial dependency on jhuming structured their socio-cultural, politico-administrative, religious practices and most importantly the land use system. It constitutes their life-world as their worldviews engrossed over their relationship with jhuming practices. Inherent in it is the land use system which essentially is the basic resource for the practice and continuance of jhuming. Classification and categorisation of land and forest area was based on vernacular understanding and livelihood requirements, rather than permanent mapping and cartographic divisions. In addition, systematic tapping or capitalisation of resources was ingeniously devised through cultivation of the soil by human labour which is relative to production and consumption.

At the backdrop of divergent opinions about jhuming this study intends to explore the indigenous practices of shifting cultivation vis-à-vis the land use system among the Kukis in the hills of Manipur, particularly in Chandel and Tengnoupal districts. For an in-depth enquiry Chehlelep village in Tengnoupal district and K. Savumpa village (locally known as Khongkang) in Chandel district are taken as the case villages. Its focus is reasoned by the fact that the debate around the sustainability of jhuming is intrinsic to the land system. The study is based on qualitative methodology using interviews and observation to generate primary data. In addition, relevant secondary literatures both in English and vernacular were used to inform the study.

Theoretical and policy concerns

Although jhuming still forms the dominant mode of land use in the tropics especially among forest dwellers, it incited debates over the question of environmental consequences or sustainability. The totalising state perceived it as primitive and wasteful of resources with perilous environmental and ecological consequences, drifting away minute and diverse understanding of its practices significant to the Jhumias. The theoretical odyssey trekked through conceptual building and dissection in arguments 'for or against' the significant indigenous practice, resulting into states intervention to mitigate and control. Earlier definitions stress to encompass the nature of its practice. Thus, shifting cultivation was defined as, "an agricultural system in which the fields are cleared (usually by fire) and cultivated for shorter periods than they are fallowed" (Conklin, 1957). It is characterized by a "rotation of fields rather than of crops, clearing by means of fire and manuring (slash and burn), absence of draught animals, use of human labour, employment of dibbling stick or hoe and short periods of soil occupancy alternating with long fallow periods" (Pelzar 1958, quoted in Sachidananda 1989). As opposed to the sedentary or settled agriculture of the valley and terrace cultivation in certain hill pockets, jhuming is temporary, practice through 'slash and burn', 'rotation of fields' through fallow management and with

negligible chemical fertilizer input. The jhum cycle through fallow period for regeneration reflects a typical land use and management system which is unique for each practicing community. In the traditional jhuming practice, there is no or negligible chemical input, where the burnt remains act as fertilizer. Recognising this significance, Odum (1971) writes “by cutting the forest and burning the felled trees and litter, the swiddener makes use of an artificial energy pulse that eliminates competitor species and concentrates nutrients and thereby transfer the energy flow into food crops.” It is therefore an active manipulation of a patch of the forest and conversion to a more open and useful succession for the cultivator (Rambo, 1981: 36).

Several perspectives emerge in the theoretical dispensation associated with jhuming. Central to critiques was an evolutionist perspective that regarded jhuming in historically determined linear progression from primitive to modern agriculture. “It progress from primitive hunting/gathering to jhuming agriculture and then to modern settled agriculture” (Greenland, 1974). This approach viewed jhuming as a “distinct stage in the historical evolution of agriculture and modern land husbandry, marking a transitional stage between nomadic hunting and gathering to sedentary agriculture” (Darlong, 2004). In brief, it is seen as primitive and the intensive sedentary agriculture as modern. This view neglects the consistency of its practice among the indigenous tribal communities over the century. On the other hand, taking cognizance of significant amount of livelihood constituents by drawing from the forest, it is also viewed as an ‘agroforestry’ (Ramakrishnan, 2004), or an ‘agro-ecosystem’ which stressed swidden/fallow as “neither static nor necessarily stable system of agriculture” (McGrath, 1987:223). Here it is consider as part of an overall subsistence strategy or “multi-niche strategy, combining agriculture with hunting, fishing and gathering, with labour being invested as needed, creates an agro-ecosystem that can be highly productive, stable and sustainable. If one subsystem fails, the utilization of another subsystem can be intensified to provide sufficient food” (Warner, 1981). For instance, “in case of crop failure, forest resources provide food supplies in addition to house building material, fuel wood, and timber” (NITI Aayog, 2018). Therefore, the cumulative forest resources are essential constituents or supplements to their livelihood requirements which can be harvested according to needs to receive the best pay-off under a given circumstances. Thus the forests constitute important utility systems with certain form of rights and privileges.

Recognising the relative positioning of jhuming to isolated hills with communal practices rather than state instituted property regimes, it is also viewed as an ‘agro-political strategy’ to keep the state at arm length or distance from the state.⁵ In this regard, Scott (2014:191-193) writes “it is an escape agriculture, fiscally sterile, diverse, dispersed, hard to monitor, hard to tax or confiscate, and inherently resistance to appropriation.” This perspective takes location and mobility as an important feature, where shifting cultivation landscape reflects a margin to the centre (or the state) – with the traditional land system based on the village commune, and mobility serves as strategy for evading the state making project. Intrinsically, shifting cultivation was associated with tribe and hills, while sedentary agriculture was associated with caste and valley. This differences or otherness was also seen in terms of property relations. The settled agriculture reflects a space of eminent private property regime

while community ownership of natural resources is an important characteristic of shifting cultivation (Michael, 2022:14). Consequently, development initiatives often push shifting cultivation deeper into isolated hills with the state expanding its realm of influence.

Recent studies have shown that, shifting cultivation is neither primitive, nor necessarily destructive to the forest ecology. It is rather, a complex agricultural system that is well-adapted, under certain conditions, to the environmental limitations of the tropics based on Local Technical knowledge accumulated over many generations (Bodley, 1976: 48). Local practices to do with ecosystem and resource management gave the indigenous groups the experience to deal with the uncertainty and unpredictability intrinsic to all ecosystems (Berkes, et. al., 2000). In jhuming, after a clearing has been used for cropping, natural succession follows and therefore shifting cultivators actively re-establish the forest (Warner, 1991; Odum, 1971). This form of integral swiddening does not destroy the forest forever and in fact the continuity of jhuming relies on availability of regenerating fallows. Thus, in jhuming areas we see forest cover at altered density, highlighting the inevitability of forest and forest cover to jhumias.

The tribes are known to be usually practicing *integral* swidden, a land use system based on “a more traditional, year-round, community-wide, largely self-contained, and ritually sanctioned way of life” (Conklin, 1957: 2-3). It is a “land use system that employs a natural or improved fallow phase, which is longer than the cultivation phase of annual crops, sufficiently long to be dominated by woody vegetation, and cleared by means of fire” (Mertz, 2009). “Most ethnic minorities regard it as a system in which the quantities of agricultural products grown depend on the need of the cultivators” (Sengupta, 2013). The need base cultivation or production for subsistence limits environmental consequences. However, the rise of the nation-state with increasing global concerns of the environment, ecology and climate change, wantonly labelled shifting cultivation as the main cause for its degradation. Thrupp et. al. (1997:9) argues that, “shifting cultivation and the people who practice it are often negatively stereotyped and are widely perceived by many scientists and policy makers, as well as the general public, to be primitive, backwards, unproductive, wasteful, exploitative and destructive to the environment.” He further argues against the eight myths associated with shifting cultivation as:

agriculture development stages (evolutionary perspective), homogeneity of its practice (jhuming) and practitioners (jhumias), as unconnected and isolated to the modern commercial market activities, as low production which supports low density population, as destructive to environment, as wasteful and unsustainable, as causing the majority of the tropical deforestation and soil erosion, as low levels of technology with limited knowledge of agriculture, as existing in open with no legal rights or control necessitating state intervention, as inevitability of state and international agencies intervention to bring about beneficial agriculture and environmental change (Thrupp, et. al. 1997).

Similarly Dove (1983) argues that “much of the debate dealt not with the empirical facts of swidden agriculture, but rather with widely accepted myths, and that explains

the widely failure of the developmental schemes involving swidden agriculturists.”

Varrier Elwin was one of the earliest tribal experts who invoke policy thinking on Jhuming in India and Northeast in particular. In 1957, he describes “the people of NEFA (now Arunachal Pradesh) nearly all practice jhuming and this is closely linked with their mythology, their social customs and even their religion.” He further posits that, there are three ways of dealing with shifting cultivation – to forbid jhuming altogether, to permit its practices without check, or to take the middle path (Elwin, 1957:22). The first stream of thoughts argues that shifting cultivation is primitive and wasteful, and therefore has to be dealt with stringently. This line of argument Sengupta (2013) asserts, ranges from agro-engineering problems, pollution and soil degradation, loss of forest cover, low productivity and low market value.’ There are various views in this line of argument; those who acknowledge its practice in the past but reject it in today’s circumstances, and those who do not criticise the method but the cultivators for using the non-traditional method of cultivation. Consequently in India’s Northeast, “the agencies that were assigned the task to constantly monitor the status of shifting cultivation in the region like the ICAR, since its inception till date has found the tribal guilty of their age-old practice. In its all comprehensive report on shifting cultivation in the north eastern region, it paraphrased jhuming to be primitive, uneconomical and more curiously a non-scientific practice” (Das, 2006). This demerited the practice of jhuming owing to policies for substituting with permanent or sedentary agriculture. The second stream of thoughts was reasoned by the fact that, “shifting cultivation is scientific that are suitable to the hilly and inaccessible terrain, because of the geographical and ecological reasons” (Sengupta, 2013) or “in response to the physiographical character” (Xaxa, 2008) that appears to be the most effective method for dealing with the ecological realities of the tropical forest (Cox and Atkins, 1979). The third way of dealing with Jhum is taking the middle path which suggest to integrate jhuming with improve modern scientific methods within the traditional frameworks (Elwin, 1957). Elwin propose this as a political strategy of integration and not assimilation – through tribal land ownership and dissuading fear of losing social customs with external influence.

In India, there is ambiguity in dealing with jhuming often resulting into misdirected plans and policies, and subsequently its failure. Fundamental problem is the obscurity or ambiguous definitions of jhumland, often categorised as ‘wasteland’ and in some instance as ‘forest’ and/or ‘agricultural land’, contrary to the jhumland being important land use system for the tribes. Recognising this obscurity with consequent negative impact, NITI Aayog (2018) reported that:

Shifting cultivation lands fall under the purview of agriculture during the cultivation phase, but come under Forests during the fallow phase – the same piece of land under two subjects at different time periods. This causes such land to be subjected to different laws, regulations and management, many of which often become self-contradictory and negatively affect the upland farmers, restricting their control, decisions and investments on such plots (see also; Tiwari & Pant, 2018; Kurien, et. al., 2019).

The mobile nature posits difficulty for the state to capture jhuming and jhumland with rigid predetermine categories. As a result, though it is still largely practice by tribal communities and jhumland embodies large chunk of tribal land use system, there is no specific department or ministries assigned the task of dealing with jhuming, deterring its recognition and development initiative for the Jhumias. Minuscule initiative from agriculture, rural development, tribal affairs and, forest and environment, with no intensified policies has rather perpetuated increasing stereotype. NITI Aayog in its comprehensive report (2018) vouched that, this ambiguity needs to be addressed and shifting cultivation lands with long fallow cycle should be categorized as a distinct land use, thus removing their categorization as ‘abandoned land’, ‘wastelands’ and ‘Unclassed State Forests’, proposing for categorisation as ‘regenerating fellows’. It further proposed to set up ‘Mission on Shifting Cultivation: Towards Transformative Changes’ under the Ministry of agriculture. Optimistically, this report has drawn attention to the problems of jhumland categories which is centric to the problem of dealing with jhuming and jhumias in particular.

Jhuming (Shifting cultivation) practices among the Kukis

Jhuming is largely practice in the traditional hill territories, reflecting the hills as sites of traditions and traditional livelihood. The rough hilly terrain, forested landscape and tropical climate condition the jhuming practice and its continuance. It is the main source of subsistence, substituted by foraging, hunting and gathering, reflecting an agro-ecosystem with multiple livelihood strategies. The practice is largely based on ingeniously developed system of cultivation, characterise by minimum external input – in terms of draught animals, plough, chemical fertiliser, irrigation facilities and other mechanisation processes typical to modern agriculture. In addition there exists minimal modification of environment in terms of its utility, except for their jhuming requirements. A typical examination of Jhuming practice among the Kukis cannot be isolated from households⁶ and the village unit. The household serves as unit for the limits of cultivation (food production) and consumption. A combination of jhum plots of each household determined cultivation area of a particular year. The village serves as an entity to determine land availability and limitations for cultivation. The territorial limits of the village and the expanse of forested landscape is significant to determine the jhum cycle or longevity of fallow period and the exposure to other subsystem – hunting, fishing, foraging and allied activities which supplements the jhuming economy. Moreover, it also serves as reference for organising of land system and requisitioning of collective labour.

The prevalence of jhuming practice among them was first described by colonial writers. Among the Thadou-Kukis, W Shaw (1928:88) described the practice as:

In *jhuming*, the jungle is cut in January or February annually. It is then allowed to dry thoroughly and is burnt. After that the field is cleared of debris and the sowing begins. Three to four times is the usual number of weeding when the crops are growing. The crops are cut with a sickle which has a saw-like edge. The heads are collected on the field and there thrashed and winnowed, and the paddy is stored in the field house called *lou buh*. It

is carried up to the village as required and pounded into rice for daily consumption. The harvest starts in October and ends about the early part of December, according to whether the crop is of the early or late ripening type. The Thadou, however, prefers the late ripening kind of rice which he says has a better flavour and is more sustaining.

The jhuming calendar and its tasks were carefully performed, through knowledge acquired by critical reading of their environment and climatic conditions. For instance, the classification of rainfall into *changpoldel*, *thomtipi*, *khopigo* and *chuhgo* was associated with jhuming tasks. The *Changpoldel* (literally meaning the rain that smashes the straw remains on the ground) is a few days rain which occur after the harvest in the month of December or January. Usually, clearing the field site begins after this rain. *Thomtipi* is the rain which occurs in the month of February or March. The process of burning is done before or after this rain to ensure undisturbed and proper burning. *Khopigo* is a heavy rain with strong winds, usually in the month of March or April after which sowing is done. *Chuhgo* is the rains in the rainy season.⁷ The earlier three types of rains may occur in variant, however, this understanding of the climatic conditions based on reading the cloud and wind direction ensures planning and execution of the jhuming processes accordingly.

In the jhuming operations, the vast forest territory of a village is cleared 'slash and burnt', cultivated by planting of rice, which is the staple food and several vegetables. After the harvest, the field is then left fallow and cultivated back again after certain period (jhum cycle). The following are the processes of jhuming among the Kukis.

Selection of the jhum site: The deliberation for selection of a jhum site is done during the annual assembly of the village called *changchikho*, held usually in the month of January. The meeting is led by the chief and the village authority, previously known as council of village elders or *semang pachong*. All important matters related to jhuming were thoroughly deliberated and decisions taken accordingly. The discussions and decisions were based on collective sharing of experiences inculcated through their long association with the land and jhuming. Selection of the jhum site is criterion on – the number of households, the sun and the wind directions, the nature of forests, soil fertility, distance from the settlement area, and most importantly the maturity of the land for cultivation. This was followed by preparation of equipment's – sharpening of knife, hoe and axe, and refurbishing of its wooden or bamboo handles.

Clearing of forest (Lou-vat): *Louvat* is the beginning of labour exertion where the allocated jhum site is cleared using traditional tools like knife and axe. Each household first determine the area of plot to be cultivated to avoid unnecessary clearing and wastage of forest resources. Then, small trees and shrubs are felled, while the large trees are clean off the branches without felling the entire tree. After clearing, the area is left to dry for burning.

Burning (Lou-Hal) and cleaning: It is done after the slash trees and shrubs are completely dried to ensure maximum burning. Careful consideration is given to the *thomtipi* rain and windy nature of the season to avoid weather disturbances during burning. It is critical stage in the process of jhuming, and is carefully engineered to

avoid cross fire or wild fire. To avoid fire hazards, a fire-way called *meilam* is prepared by cleaning the boundaries. After burning the area is clean off, while the ashes remain serves as fertilisers.

Sowing (Chang-tu): Burning is succeeded by the task of seed sowing. Essentially the types of crop cultivated are consumption oriented. The principle crop cultivated is rice which is the main staple diet along with maize and millets. In addition, several vegetables such as – yam, cucumber, pumpkin, potato, ginger, cabbage, beans, chilli etc. are also cultivated. These are traditional varieties which are treasured through their agriculture history and have resilient features to the specificity of their environment.

Weeding (chang-ham): *Changham* is the process of cleaning the weeds, which may be done several times contingent on the outgrowth of weeds. Generally the weeds growth depends on two conditions; the type of forest cover – either with tree or bamboo cover, and the fallow period. The forest area with trees needs less weeding while the forest area with bamboo needs more weeding. In addition, it is also condition by the fallow period, where enough fallow periods limits the growth of weeds which otherwise is opposite.⁸ This therefore necessitates adequate fallow period in jhuming for sufficient agricultural output. Usually weeding is done two to four times reliant on the growth of weeds. The four different weeding processes accordingly are; *Nungsu*, *Hamdong*, *Hampi* and *Nuthol*. It is done using sickle and hoe stick. As the jhum field is usually a hill slope, weeding process is done from the lower limit to the upper limits.

Harvesting (Chang-at): *Chang-at* is the harvesting process, where the crops grown are cut, gather, thresh and then winnow for cleaning. The clean product is secure in the field-hut called *loubuh*, while it takes days and weeks to fetch them home, depending on the distance and amount of harvested products.

Labour management: Jhuming as is widely known is labour intensive. Communities engage in this form of cultivation have certain form of socio-cultural practices to meet the high labour demands. Among the Kukis, this is met through the organisation of *lawm*, which probably evolves out of the labour intensive nature of jhuming and is central to their labour management. It is a traditional labour organisation or “village labour corps” (Gangte, 2012). It is based on the principle of mutual exchange of labour, organised around the notion of collective labour and self-help. The mutual concern for each other and sense of reciprocity enhances the group coherence and solidarity. There is no restriction on the number of members or on the number of *lawm* a village should have. Sitlhou (2015) observes that there may be “four types of *lawm* classified based on the age-groups – *lawm changpah*, *lawm neo*, *lawm lai* and *lawm pi*.” Based on the age-range groupings, the *lawm changpah* is the groups in the workable youngest age range, followed by the *lawm neo*, *lawm lai* and then the *lawm pi*.

Another significant feature of the *lawm* is the nature of membership open to all irrespective of sex or marital status. Jamkholun Sanchong (undated, in Thadou vernacular) contends that, *lawm* has the essence of ensuring equality among the villagers through self-help. He delineates thus, ‘Khosung Khat na az haw tum az vai tum umlou wa tangol la az chaen khom thei na diu wa Lompi hi Py le Pu te’n ana

phudoh uh ahi. Khusung a meithai, chaga, chatmo, hatmo jouse zonk lom upa hon a caihuoi uh wa me jouse lompi lah az jaosohkei ze u ahi' (trans. In order to ensure equality in a village without divisions of the poor and the rich *lawmpi* has been instituted by our forefathers, without any distinction based on widow, orphan, disability and the weak. The leaders of the *Lawm* ensure participation of all). Though *lawm* is associated mostly with jhuming process, it echoed through other labour demands like building of houses and fetching of firewood etc. Sometimes a particular *lawm* can be hired by other villagers or chiefs. In such case, they are paid based on collective consensus or in the form of food and drinks. The *lawm* also serves as platform for imparting and acquiring knowledge related to socio-cultural practices, the art and respect for work, and the important knowledge of jhuming.

Fallow period and its management

One of the core concerns of categorical classification of jhumland is the fallow land, which was cultivated but fallowed for re-establishing or regenerating the natural forest cover. Every community practicing jhuming has certain form of management, either in the form of continuous engagement or their restraint behaviour. For instance, in Churachandpur district of Manipur bamboo and *parkia* (*parkia timoriana*), a nitrogen fixing tree for soil restoration were planted in jhum fallow with the support of the Agriculture Department. In Kohima district of Nagaland, passion fruit is planted in abandoned jhum fields (Chakraborty, et. al., 2022:41-42). While in many cases it remains without any human intervention with restraint behaviour to re-establish its natural forest cover. This allows the capacity of carbon sequestration and nitrogen fixation to regain and retain the soil fertility. Exception to this may be the cultivation of crops or vegetables which can be harvested multiple times. For instance in Chehlep village, red pepper (locally known as king chilli) is cultivated along with other crops in their jhum field which is harvested multiple times for two to three years.⁹

The fallow period is an essential part of the jhuming processes which determines the suitability for the next cultivation and also the larger question of jhum sustainability. The duration has correlation with the size of land possession and the population or number of household. For instance, Chehlep village which has limited territory has maximum of about eight years of fallow period while K. Savumpa village having large territory, has more than ten years fallow period. This however may further depend on the fertility of the soil in a specific jhum area. In Chehlep the shortening of fallow period was mainly due to increase in population. Unlike others which practice cultivation in a specific area for two years or more, among the Kukis the dominant practice is cultivation for a year and then fallow the land.

The fallow period or the jhum cycle depends on the type of soil and its regeneration capacity. This is influenced by the climatic conditions, where forest regeneration was quicker in warmer areas and steady in colder areas. Therefore preferably jhumland is located in the warmer areas rather than the colder areas. It also goes in consonance with suitability of rice cultivation in warm climate. Essentially, the harvest of the next cultivation depends on appropriate fallow period with enhanced maturity of the soil facilitating good yield. In the context of Chehlep village where jhum fields are mainly in *simgam*, it takes about eight to ten years for maturity of the soil. This is an

area located in lower altitude with warmer climate. Enough fallow periods ensures the tree growth, minimise bush or shrubs, allows proper burning, restricted the growth of weeds facilitating healthy growth of crops and therefore ensuring good harvest.¹⁰ This idea influences the jhum cycle or rotation and the system of cultivation in the area. The immature land is not ideal for cultivation as it has more grasses resulting into difficulty in burning well and easy outgrowth of weeds.¹¹

In essence, the jhumland is considered matured with enough fallow periods limiting infestation by weeds and pests and moreover ensuring soil fertility, making the land suitable for cultivation again. The local understanding and classification of the jhum field into *sainou* and *saitah* is synonymous with the fallow duration and the regeneration status. The *Sainou* is not good for cultivation as the trees and shrubs still begins to regenerate. While, *saitah* is good for cultivation as the trees outgrowth the shrubs and bushes which further limits the growth of weeds.¹² Thus, the jhum cycle depending on the type of land is important for jhumias. An interviewee describes, he has been making a living by jhum cultivation and cultivate the area size of four *tins* and harvested about 280 *tins* in the previous year. In his cultivation process he does not use any type of chemical fertilizers. Though there are few families using *urea* the practice however is still limited. Emphasising the importance of sufficient fellow period he says, in the hills if there are enough fallow periods using of fertilizers is not necessary as the fallow period re-established the soil fertility.¹³ Therefore essentially adequate fellow period overrides utility of chemical fertilisers for good harvest in traditional jhuming practices.

Kukis chieftainship and shifting cultivation

Shifting cultivation and land use system among the Kukis cannot be seen in isolation from the traditional institution of chieftainship. It forms the basis for the organisation of the social and political lives (Gangte, 2012). Comprehensively it structures the village governance in land and people, where all powers, authorities, rights and privileges operate within its realm.

The chief (called *haosa*) is the head of the village and the chiefship is occupied by the *upa* (eldest) on the direct line of the senior descent and enjoys full privileges (Shaw, 1929; Soppit, 1887; Ray, 1990). “The *haosa* is associated with *upa* who has knowledge of customary laws and its interpretations” (Haokip, 2009). It is hereditary, inherited by the eldest son through the patrilineal descent (Gangte 2012; Haokip, 2009). His house is usually “the largest of all houses” (Shaw, 1929), and is an architect structure of governance called *khosung innpi* (Village Parliament) and village court. All important meeting, planning, decisions making, and judgements are adjudicated in the chief house. His power and authority premise around the principle of *upa* to regulate the lives of his villagers, but is based on the customary element of *khankho-nunkho* (knowledge of customary practices and selfless concern for others). His authority comes with roles and responsibilities for the welfare of the villagers. The chief has to advice and is consulted on all important matters of the village, and his decision is final.

The roles and responsibilities of the *haosa* goes hand in hand with certain privileges and tributes which include – Changseo (an amount of rice paid as a tribute to the

chief), Khotha (One day collective labour), Samal (hind-leg of an animal killed in hunting), selkotkai (an animal tribute paid at the time of selling or killing for rearing an animal in the village territory) and migration due (Soppit, 1887; Shaw, 1929; Ray, 1990). What is particularly interesting is *changseo*, which is an annual tribute to the chief for access to the jhumland. A convenient day is fixed after the harvest to gather the *changseo* called *changseo juneh ni*. The chief and his extended families are exempted from paying the *changseo*, but they contributed a jar of *ju* each and under the leadership of the chief, feed the gathering. This tribute, unlike ‘tax’ which has strict sanctions, exempted the weaker sections such as the widows and families with poor harvest. On this day, matters and issues related to jhum were discussed with merry making. In case the chief feels it necessary, he might called for *khotha* instead of *Changseo*. In such case, he holds the responsibility of arrangements for food and drinks.

In the administration of the village, the chief is assisted by the village council called the *semang pachong* and the council of clan elders called *phungkhai upa*. However, the institutional arrangements may vary for different villages. There may be the presence of both in a village while others may have only one. Significant to it in either case is the element of clan or sub-clan representation (Haokip, 2022). For instance, in Chehlelep village the appointment to the village council is based on clan and sub-clan representation and this constitute the main governing body.¹⁴ While in Longja village, besides the council they have the council of clan elders or *phungkhai upa*, constituted by clan or sub-clan elders within the inhabitants of the village.¹⁵ The council is constituted by elected or selected members (based on voting or consensus) with knowledge of socio-cultural practices, customary laws and its interpretations. The reasons why elders are deem fit is founded on the nature of oral transmission of cultures and traditions, meaning the elders have an acquaintance with the customs and cultures through their lived experiences. This council with functions specified according to their portfolios assist the chief in the administration of the village. Thus, the Kukis have a well-established village and land administration system, often delivering to its villagers according to the customs and traditions. The council generally includes – the *semangpu*, *pachongpu*, *lhangsampu*, *thuchingpu*, *gouchingpu*, and *changloipu*.

The landholding system was based on the chief (Gangte, 2012) and he is the custodian of the village land (Kipgen, 2018:115). This ownership system of land and forest resources forms the objective bases of legitimacy and authority within the Kuki society (Ray, 1990:44) In fact, “the control and ownership of land by the Kukis is linked to identity and territoriality as chiefship is considered the perennial source of customary laws” (Haokip, 2009). However, by customary convention the ownership is not exclusive, but he has to administer the land by protecting the interests of the villagers. Inherent in it is the non-negotiable accessibility and utility rights unless it is in opposition to the collective rules established. Therefore by customary practice he normally distributes or allocates jhumland or cultivable lands to his villagers through collective decisions under the leadership of the village council. In this respect, all important matters relating to cultivation area and its use were based on villagers’ collective decisions.

The traditional Land use System among Kukis

The concept of land use system is vast and there is a plethora of research done which may range from the earth natural system to its complex relationship with human beings. According to Verbert et al. (2013) “land system constitute the terrestrial component of the earth system and encompass all processes and activities related to the human use of land, including socioeconomic, technological and organizational investments and arrangements, as well as the benefits gained from land and the unintended social and ecological outcomes of societal activities.” The discourse on land use system of the tribes, who are at the margin of modern state and market, with less technological and material inputs, reflects correlation between the agriculture system and traditional institution. The earlier signifies the nature of livelihood strategies in relation to their resource position. The latter signifies the context of accessibility and utility rights through traditional convention. These variables framed the nature of land use system. The agriculture system and its institutional arrangements have been extensively discussed above; it is pertinent here to unravel how the land use has been patterned accordingly.

The peculiarity of traditional land use system of the Kukis is found in its village on the hills where shifting cultivation have been the main source of livelihood. The focus here is on the traditional lands in the hills, which are neither commercialised nor transferable, or beyond the reach of the legible state project of private property. The rural hill[s] is associated with shifting cultivation and shifting cultivation with the village, and to speak of the Kuki land system one has to speak of its villages. This was naturalised overtime and reaffirmed by customs. For the Kukis, the village is not only the limits of its institutional arrangements, but also of its territorial limits whereby arrangements of the land use system occur within. The land system is grounded on the institution of chieftainship and the *haosa* exercise the highest authority. However, all important deliberations and decisions on land use were, ‘from end to end’ comprehensively done in his house called the *khosung inpi*. Here, crucial attention is given to the livelihood requirements of the villagers – shifting cultivation, hunting, fishing, and foraging. Essentially the village territory is divided into; settlement area, forest reserve, jhumland, and Hunting Ground. This diversified land use is carefully engineered to suit the land management and utilization system based on Jhum cultivation which is the primary source of livelihood.

Khomun (settlement area): The first area locally called the *khomun* is principally the settlement area where each household in the village has allocated homestead plot. It is given priority contingent on the landscape for construction of houses, availability of clean drinking water, Jhumland distance, sun and wind direction, free from knowledge of disturbance from evil spirit or misfortune, and non-prevalence of diseases. In the modern era when means of transport and communication became essential, the settlement area is increasingly criterion upon its road connectivity and accessibility. The right over the homestead plot is condition by the permanency of their settlement in the village. Once they decided to migrate, the land right is reverted back to the chief. However, they have the right to take or sell all properties which were acquired.

The settlement pattern among the Kukis is linear and compact with houses in close proximity to each other. The village, particularly the settlement area is usually located in the hill top, or on ridges, the house facing one another, with a broad path running down the centre (Soppit, 1887:9). Every house has some kind of fence round it (McCulloch, 1859:58). This is practiced till today with villages often having road/path in the centre running through the village, with boundaries of each household fenced with wood or bamboo. The nature of its compact settlement pattern is influenced by the close societal relationships and its land utility. Within the settlement area there are many common places for public convenience such as the playground, the church, community hall and source of water. The authority for maintenance of these common resources rests with the village council and the council of clan elders. But authority for specifically allocated sites such as the church rest with the religious leaders.

Acquiring membership to a particular village follows certain customary practices. Here a family has to request the chief with *ju* (rice beer, change to a 'pot of tea' locally called *chabel* in present context) as good gesture to admit his family to the village. The chief in consultation with the village council admit the family to the village if they think fit. Once an individual or a family becomes a member of a village, [s]he has all the rights, privileges and obligations as other members. Being a village member does not entitle individual ownership of the occupied land, but enjoy all privileges to the marked land while he or she resides. The settlement area is encircled by the next land use type called village reserve locally known as the *thingchang* or *khotu*.

The Thingchang/Khotu (forest reserve): The *Thingchang* or *Khotu*, as locally known, is a village forest reserve that is encircling the settlement area and lies in between the settlement area and *jhumland*. Guite (2013:14) asserts that, "a typical traditional Kuki village was surrounded by its reserve forest called *meilam* (literally fire way) or *ujok* (preserved trees)." The *meilam*, as the name connotes, was mainly a buffer against wild fire that primarily might occur due to *Jhuming* process or wild fire. It also protects the village from other natural calamities like storm and strong winds which have the potential to destroy houses or properties within the village.¹⁶ The making of this buffer involves villagers restraining themselves from felling of trees, preserved or reared trees over several metres which might vary depending on the forest ecosystem and rules established. The thickness of this forest reserve would determine the capacity to withhold wild fire or other natural calamities. In effect, there is prohibition of felling of trees which might invite punishment if noticed. However, there are permissible rights within this area for procuring seasonal wild fruits, vegetables, dry wood, and in few instances as a grazing ground for domesticated animals.¹⁷

The responsibility of maintenance and management of the village reserve rest with the village council. As a practice they appoint one or two members based on consensus to be in charge of the area. The member(s) are responsible for enforcement of its related rules and ensuring of collective labour when necessary for its maintenance. They take cognizance of any rule violation and report the issue during the village meeting for appropriate action. Norm defaulting behaviour is seriously dealt with, though penalties may be minimal. For its maintenance, the villagers invest

one day collective labour annually. The main task here is to clean the marked boundaries so that it is well protected from wild fire.

Jhumland or cultivation area: Beyond the forest reserve area is the Jhumland which serves as the area for shifting cultivation. This area is usually the most fertile area within the village territory and thus is considered for cultivation. Since jhuming is the main source of livelihood jhumland constitute major component of land utility among the Kukis. The complexity of farm-forest relations and its use system was established through practical experience on tilling the soil. Building on the knowledge accumulated over generations they systematise their jhumland utility and identification of annual jhum area.

The understanding of the levels of maturity of jhum area and its cycle is based on certain mode of classification. In this respect, the jhum area is classified into the *lounun*, the *sainou* and the *saitah*. The *lounun* refers to the Jhum land which is presently cultivated (or say in the current year). The *sainou* refers to a part of Jhumland which has been cultivated recently and the fallow period does not exceeds ten years. On rare occasion part of this area may be cultivated sooner based on soil fertility, but is usually fallowed to attain the status of *saitah*. The *saitah* is the jhumland area which has been cultivated but remains fallow for long, usually more than ten years or so. The nature of land use arrangements, especially of jhumland is transitional and/or cyclical, where *sainou* becomes *saitah*, *saitah* becomes *lounun* and simultaneously *lounun* becomes *sainou*. There is no strict sense of rigid boundary limits over these classifications. But, the duration of its regeneration is important, as this eventually reflect the growth of its natural forest cover. This classification may vary from one village to another depending on the abundance or availability of jhum area. For instance, Chehlep village which has about eight or nine jhum area might have lesser years for its classification. While, K. Savumpa village which has more than twenty signified jhum area might have more years for its classification.¹⁸ Essentially, the longevity of the jhum cycle depends on the availability of land for cultivation and its fertility.

In the jhuming practices there is also the concept of cultivation in between different jhum fields, which usually remains untouched. This is called *kahsi*, literally meaning between different jhum area.¹⁹ For such cases, households are grouped and allotted plots for cultivation in small patches in between different jhum area. This occurs rarely and does not assume strict classification.

Hunting ground or Gantumang: The last area that is encircling the village called *gantumang*, extent from the limits of jhumland to the extreme limits of the village boundary. It is a virgin, untouched and conserved forest area. The thick undergrowth and undisturbed ecosystem makes it suitable for flora and fauna to subsist in their natural settings. Therefore, it constitute an important source for acquiring non-timber forest products such as; wild leaves, fruits, vegetables, dry woods, and also as space for engaging in hunting and fishing. In this respect, Guite (2013:14-15) describes, "this deep-forested area was literally preserved for wild animals and birds to flourish and from which they procured their meat, where the villagers were engaged on a regular basis to hunt for wild game." He further asserts that, this 'hunting ground' could be shared between two adjoining villages in times of peace, whilst a demarcation

line was drawn during conflict (Guite, 2013:15). Essentially, adjoining villages often shared resources within this area with the privilege of hunting, fishing and collection of non-timber forest products. The Kukis having environmental consciousness avoid unnecessary clearing and preserved this part of the dense forest to ensure protection of the natural forest habitat. It serves not only as site for conservation of natural forest eco-system, but simultaneously as site for protection of their habitat from land degradation.

Certain portion of this area or hill is also associated with their belief system. In this sense, it was their 'sacred groves' locally called *haosapi/haosapu mol* literally meaning the hill residence of [fe]male spirit. Every village has certain hillock or hill ranges or isolated water bodies as sacred.²⁰ "This part of the forest was also where many of the malevolent spirits resided" (Guite, 2013:15). Therefore, it was revered and preserved with restraint behaviour "where damage caused to anything was likely to bring the wrath of the reigning spirits upon the whole village community" (Guite, 2013: 15). On compelling situations, if any intervention has to be made into the area the village priest performs rituals to please the spirits therein.

Beyond landed property: collective rights to livelihood

Tribal societies who have not been brought to the mainstream consciousness of eminent private property regime historically evolve shared or communal form of land and forest resources based on traditional and customary conventions. Exclusive private property rights dispensation propagated by the state and market has been problematic when looking at the land rights discourse among them. In Manipur, the notion of private property rights on land as in '*pattas*'²⁰ does not exist in the hills. Therefore, it has to be located beyond ownership rights and situated in the communal practices of 'rights' or 'collective rights' per se, within the socio-cultural formations and customary conventions. The rights arrangements were solely based on the traditional institution of each community, and chieftainship to the Kukis in particular. This shapes the normative property relations and structures the livelihood practices within the village community.

The land system is grounded on the institution of chieftainship. "The *haosa* has the absolute right of ownership over the entire land of the village" (Gangte, 2012). This right of land ownership was customarily hereditary through the patrimonial descent where according to customs, the chief who is the eldest (called *Upa*) inherit the land from his father and pass it on to the eldest son. In regards to the patrilineal nature of inheritance Hoineilhing (2015) asserts that, "the right to land among the Kukis is gendered by customs and traditions." Thus, customarily the younger lineage and the women can in no way become the chief, and simultaneously cannot have property rights on land.

Though the land and forest explicitly belong to the chief, yet implicit to the system is the non-negotiable rights the villagers possessed on its use. Beyond the context of ownership, the villagers are entitled every right to cultivate the share of their field and collect non-timber forest products. This access is determined through the household unit depending largely on their labour supplies and livelihood requirements. Thus, though the right of ownership per-se belongs to the chief, there exists a 'principle

of collective rights', where "the lands are distributed and each villager is allowed a plot of land each year" (Ngaihte, 2004:59). In regards to the rights of accessibility Gangte (2012) opined that, "howsoever absolute the chiefs' right is, in consultation with the *Semang Pachong* he normally allows his villagers to cultivate and utilize as per the requirements." In a sense "the duty of the chief is to distribute cultivable lands to each household of the village at the beginning of each year" (Devi, 2006:52). Beside this, the villagers have unrestricted access to forest areas for collection of non-timber forest products, with hunting and fishing rights. In essence, by customary convention the chief under chieftainship system of the Kukis cannot act in absolutism. He rather act based on customarily approved land use pattern ensuring livelihood rights possessed by the villagers. Eventually, no individual can be denied under any circumstances the entitlements of access and use to the land and forest, unless it stance in opposition to or threaten the village common good.

The land use system which relates to the notion of access and use is therefore significant rather than the ownership system. This is important in delineating ingeniously develop discourses on land rights. The nature of land use arrangements were deliberated and plans executed through the collective decisions taken under the leadership of the village council. Here, crucial attention is given to the livelihood requirements of the villagers such as; shifting cultivation, hunting, fishing, and foraging. Every household have inalienable right to – chose and access Jhumland for cultivation, forest area for collection of firewood and non-timber forest produces, house construction materials, fishing and hunting. Thus, though there is no notion of private property on land, there exist communal form of access and use according to livelihood requirements.

Conclusion

Shifting cultivation has often been stereotypically overlooked for its environmental consequences. This simplistic view misdirected policy concerns, resulting into its failure to address the core empirical practices that has been intrinsic to jhuming. The above discussion is an attempt to throw light on the land use system vis-à-vis the socio-cultural practices which are imperative to indigenous jhuming practices of the Kukis. It therefore argues that, despite being defamed for environmental unsustainability, it is still largely practice by the Kukis in the hills of Manipur through adaptations to their topographical realities. In doing so, it argues that the land use system reflects indigenous knowledge based 'utility as well as conservation'. It essentially evolves to adapt themselves with their geographical realities – rough topographical landscape, forest ecology, climate conditions. In addition, it was also shape by their peripheral position or marginal location from the technological or material advancement. In fact, rather than being primitive and exploitative, it is a form of sustainable and adaptive strategy of 'use and conservation' of the forest ecosystem based on their livelihood requirements.

The land use vis-à-vis jhuming is essentially non-extractive as compared to the industries which are highly extractive in nature. The need based centrality of land utilisation limits environmental consequences or unnecessary destruction. Again the

nature of its temporary utility allows the forest to regenerate itself without permanent destruction like the sedentary agriculture. This ingeniously developed land use pattern has been engineered over a very long period of time through their association with the environment. The knowledge is acquired by their lived experiences, with an understanding that jhuming practices subsist only through the availability of cultivable and mature forest area.

A comprehensive policy on jhuming and jhumias has to emerge by taking cognizance of the distinctive community practices especially the land use system. Stereotypical view and its associated myths have to be overruled by rationale and geographically viable policy prescriptions. Essentially the communal practices with respect to their land and forest resources have to be recognised. Rather than an attempt at imposition of rigid and pre-determined categories which will result into more complexities, the land use variant of jhumias has to be given importance. Comprehensively, larger policy approach has to be holistic in terms of improvements in land use sustainability and enhancing sustainable livelihood opportunities.

Notes

¹ Shifting cultivation is popularly known as jhum or jhuming in the northeast India and its cultivators as Jhumias. Therefore, here jhum is use as synonymous to shifting cultivation, jhuming as the process involve in the cultivation and jhumias for the cultivators, but in citations the original word is retained to maintain originality.

² State of Forest Report, 2015. Forest Survey of India, Dehradun, Uttarakhand, India. Ministry of Statistics and Programme Implementation Year Book, 2014.

³ For details on jhum rehabilitation programmes on Tripura see; Kuki, V. (2022). Analysis of Jhumias Rehabilitation Programmes in Tripura. *Journal of North East India Studies*, 12 (1), 31-48.

⁴ For detail account on tribes within the Kuki groups in Manipur see; Gangte, T. S. (2012). *The Kukis of Manipur: A historical Analysis*. New Delhi: Gyan Publishing House. ; Seilen, H. (2008). *Rhetorics of Kuki Nationalism: A Treatise*. New Delhi: Lushtra print.

⁵ Scott study on the Zomia highlands has highlighted jhuming as an agro political strategy to evade the valley state making project. See also T. Haokip (2020) *Escape agriculture, Foraging culture: The subsistence economy of the Kukis during the Anglo-Kuki war in L. Haokip & N Kipgen (2020) against the Empire*, Routledge.

⁶ For the Kukis a household consists of family members living together, taking food from the same kitchen and most importantly cultivating the same plot of jhum field. It usually comprise of the grandparents, the father and mother, unmarried siblings (patrimonial linkage) and their children's.

⁷ Interview with Ngamkholet Haokip and Thangpu Haokip of Khongkang Village, Chandel district, Manipur on 11/06/22 and 15/06/22.

⁸ Interview with Jammang and Janglal of Chehlelep village on 21/08/22. And also with Letngam Baite of Chehlelep on 19/08/22.

⁹ Interview with Jammang Mate and Janglal Vaiphei of Chehlelep village on 21/08/22.

¹⁰ Interview with Letngam Baite of Chehlelep village on 19/08/22.

- ¹¹ Interview with Janglal Vaiphei of chehlep village on 21/08/22.
- ¹² Interview with Hemkhosei Mate and L Tongthang Mate of Chehlep village on 19/08/22 and 21/08/22.
- ¹³ Interview with Letngam Baite of Chehlep village on 19/08/22.
- ¹⁴ Interview with Holkhokhai and Jammang of Chehlep village on 20/08/22.
- ¹⁵ Interview with Paokholun and Jamlun of Longja village on 10/07/22.
- ¹⁶ Interview with L. Tongthang Mate of chehlep village on 21/08/22.
- ¹⁷ Interview with Holkhokhai Mate of Chehlep Village on 20/08/22 and Paokholun Haokip of Longja village on 10/07/22.
- ¹⁸ Interview with Ngamkholet and Jamchin of K. Savumpa village on 11/06/22 and 20/03/22. Mention may be made of – Ngalamlhang (classified into nuinung and gamlha), Jongchang, songmolnoi, gamkhet (nainung, lailha and gamlha), tuhsatmol, phaijang (nainung, lailha and gamlha), changpal lhang, vomko-pang, gal-lam, vako-pang etc.
- ¹⁹ Interview with Thangpu and Jamchin of K. Savumpa village on 15/06/22 and 20/03/22.
- ²⁰ Interview with Jammang Mate of Chehlep village on 21/08/22, Jamlun Mate of Longja village on 10/07/22 and Ngamkholet Haokip of K. Savumpa village on 11/06/22.
- ²¹ Patta is a ‘land deed’ issued by the state authority, which signify the right of ownership of a particular plot to an individual. This is implemented only in the valley areas where the Manipur Land Revenue and Land Reforms Act (MLR&LR), 1960 is enforced.

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