

A Paradigm of Common Pool Resource (CPR) under the Dzumsa System, North
Sikkim

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ABSTRACT

This paper identifies the additional factors for successful Common Pool Resource (CPR) under the Dzumsa system. It further discusses and identifies the analogous relation between the Elinor Ostrum eight designed principles of CPR and functioning of the Dzumsa system as a common pool resource that is marking its enduring presence of 171 and more years. This paper is the first attempt to study the paradigm of common pool resource under the Dzumsa system, North Sikkim.

Key words: Elinor Ostrum, design principle, Dzumsa system, Community, Common Pool Resource, (CPR) waste management, COV-19 (Corona Virus), Lachen, Lachung, North Sikkim, Sikkim.

INTRODUCTION

Sikkim has a thought-provoking history of Monarchy, democracy under Monarchy, British influence and Sikkim merger with India.² During all these transitions Sikkim have always ensured to uphold, preserve and promote the age-old traditions and rich cultural heritage of different communities of the State living in perfect communal harmony down the ages.³ Dzumsa system is a paradigm of community harmony and tradition, which has made a remarkable continuous existence and presence of 171 and more years. The main functions of Dzumsa system are to regulate and protect natural resources and livestock.⁴ Dzumsa system has tailored their functions according to the livelihood of the region, which includes Pastoralism and flourishing tourism. However, the primary function has remained unaltered and inclusive of crisis management in the region, which broadly are to conserve and protect grazing pasture, forest, livestock, water resources⁵ and waste management⁶ or safety of the region from the pandemic health crises.⁷

Scholars have written enormously regarding the administrative, judicial and the Panchayat role of the Dzumsa system.⁸ However, the functions of the Dzumsa system as a Common Pool Resource by a community are unexplored and have created a space for a consolidated overview of the function of the Dzumsa system as a Common Pool Resource (CPR) as proposed by Elinor Ostrum. The Elinor Ostrum eight designed principles on the CPR elaborate the main

² Rai, Dhanraj, Monarchy and Democracy in Sikkim and the Contribution of Kazi Lhendup Dorjee Khangsherpa, International Journal of Scientific and Research Publication , Volume 3, Issue 9 , September 2013 ISSN 2250-3153, www.ijsrp.org. Sabatier, S.B., 2013, translation Anna Balickci-Denjongpa, The Dsumsa of Lachen: An example of A Sikkimese Political Institution, Bulletin of Tibetology, 93-104

³ Supra note 1; Revenue Order Number 1, Notification No 3082/L.R, dated 24 March 1954 issued by Land Revenue Department, Government of Sikkim; Article 371 F of the Constitution of India; Rai, 2013

⁴ Macaulay, C. (1885), Report of a Mission to Sikkim and the Tibetan frontier with a memorandum on our relation with Tibet , Colman Macaulay of the Bengal Civil Service, Secretary to the Government of Bengal and Member of the Bengal Legislative Council, Calcutta: Bengal Secretariat Press, <https://archive.org/details/reportofmission00macarich/page/n5> (accessed August 8,2019) ; Hooker's trail& Sikkimese Flora, http://www.worldmarcopolo.com/hookers_trail.html ; White, J.C. (1909), Sikkim and Bhutan-Twenty One Years on the North East Frontier (1887-1908), London, Edward

⁵ Supra note 1

⁶ Waste free festival in Sikkim Lachen Village <https://www.wvfindia.org/?15162/Waste-free-Festival-in-Sikkims-Lachen-Village-Sees-Hundreds-of-Visitors> ; Waste free festival in Sikkim Lachen Village sees hundreds of Visitors, 2016

⁷ Coronavirus restrictions hit tourism in Sikkim and Bengal, Telegraph India, published on 13.03.20 by Rajeev Ravidas , Gangtok <https://www.telegraphindia.com/states/west-bengal/coronavirus-restrictions-hit-tourism-in-sikkim-and-bengal/cid/1753210>; Both Dzumsa Administration impose ban on tourist entry in North Sikkim, Voice of Sikkim, March 12, 2020 [Papon Lachen Shri Kunthup D Lacenpa and Papon Lachen Shri YT Lachungpa made this unanimous decisions for respective Dzumsa people's interest.] <http://voiceofsikkim.com/2020/03/12/both-dzumsa-administration-impose-ban-on-tourist-entry-in-north-sikkim/>

⁸ Supra note 1; J R Subba, Indigenous Knowledge on bio- resources management for livelihood of the people of Sikkim, Indian Journal of Traditional Knowledge, Vol 8 (1), January 2009, p 56-64.

characteristics of the Common pool resource, preserved and regulated by the community in different countries and in existence for more than 100 years.⁹

This paper claims that the functions of the Dzumsa system are analogous to all the eight-design principle on Common Pool Resource (CPR) as proposed by Elinor Ostrom. This research is a qualitative analysis of the existing literatures, laws and government notifications and records. The paper explores the following research questions: Whether the functions of the Dzumsa system are analogous to the Elinor Ostrom eight principles of Common Pool Resource (CPR). What are the additional factors contributing to the uniqueness of the Dzumsa system as a Common Pool Resource? This paper in the second part discusses commons and the eight-design principle on CPR as proposed by Elinor Ostrom. The third part discusses the history, meaning, structure, role and functions of the Dzumsa system. The fourth part discusses how the relation between the eight-design principles of CPR is analogous to the functioning of the Dzumsa system as a CPR and discusses the additional factors that have made CPR unique under the Dzumsa system.

EIGHT DESIGN PRINCIPLES ON COMMON POOL RESOURCE CPR

Common Pool resources (CPR) are the resources such as fisheries, wildlife, livestock, water and forest, managed and governed by users of resources.¹⁰ The management of these resources is the exclusive right of the users of the community only and they exclude outsiders' interference such as central authorities and privatization.¹¹ The community ensures that all users follow the community rules and standards.¹²

Elinor Ostrom presents a holistic analysis on the function of the common pool resource institution and community-based management of pastures, forestland, and irrigation. The identified eight designed principles are the important common features of these CPRs that existed over 100 years or more.¹³ The imbibed principles of all the successful common pool resources around the world are: 'Clearly defined boundaries, Congruence between appropriation provision rules /local condition, collective choice, arrangement, monitoring, graduated sanctions,

⁹ Ostrom, E. et al., (1999) Elinor Ostrom, et.al, Revisiting the commons: Local Lesson, Global Challenges, Science 284, 278 (1999)

¹⁰ Supra note 8; Gari, S.R., Alice Newton, John D. Icely and Maria Mar Delgado Serrano (2017), An Analysis of the Global Applicability of Ostrom's Design Principles to Diagnose the functionality of Common- Pool Resource Institution, Sustainability vol. 9, P 1287.

¹¹ Ostrom, E., et al. (2012), Common-Pool resources and the Classical Liberal Tradition, The Future of Commons, Beyond Market Failure and Government Regulation, The Institute of Economic Affairs, p1-56; Elinor Ostrom 1933-2012 <https://www.econlib.org/library/Enc/bios/Ostrom.html>

¹² Supra note 8

¹³ Gari, S.R., Alice Newton, John D. Icely and Maria Mar Delgado Serrano (2017), An Analysis of the Global Applicability of Ostrom's Design Principles to Diagnose the functionality of Common- Pool Resource Institution, Sustainability vol. 9, P 1287.

conflict resolution mechanism, minimal recognition of rights to organize and nested enterprises.¹⁴ The first principle, the clearly defined boundaries introduces a mechanism to exclude people not belonging to the community and prohibit access on common pool resources. The second principle set appropriation rules of the resources based on local condition, which restricts the time, place or quality and use of resources. The third principle, the collective choice arrangement of rules and procedure by the users of the community adds to the benefit of defined boundaries for management of resources. The Fourth principle introduces monitoring and enforcement mechanism. This principle enforces rights, duty and liability, among the users of the common resource pool. The fifth principle is graduated sanctions, the community decides on the sanction and fine for misuse of the common pool resource. The sixth principle is a conflict resolution mechanism that will ensure sustainable forms of common- pool resource management and resolve the dispute regarding the use and misuse of the common pool resource. This mechanism ensures voluntary compliance by the users of the community and further the fines are utilized for the welfare of the community. Further, when the community creates rules with the consent of the community, the community has a strong incentive to make rules work and improvise as per the needs of the community and changing circumstance of the region.¹⁵ The seventh principle minimal recognition of rights to organize, it is equally important for the higher levels in the governance system to respect the locally established rules and property right of the community, in the absence of this, the common pool resource system becomes highly insubstantial. Activities such as appropriation, monitoring, enforcement, conflict resolution and governance are part of a multiple layers of nested enterprises, which is the eighth principle. In an interconnected organization, it is pertinent that the rules are recognized at multiple levels and jurisdictions, such as local, regional and national levels, which will avoid failure due to an incomplete system.¹⁶ Ostrum principles have stood as an answer to the Hardin assumption of Tragedy of Commons.¹⁷ The community property in the past and present are evident to have maintained and adapted a communal arrangement/system to manage CPR and their persistence is not sudden or co-incidence, like in case of Dzumsa system. The traditional knowledge, experience with the resources and tested through cultural norms and practices are key to the community arrangement/ system. Supported and backed by the grass root democracy, public participation and local level planning.¹⁸

¹⁴ *ibid*

¹⁵ *Supra* note 8 (Ostrum 1999)

¹⁶ *Supra* note 8, 10, 12 (Ostrum, et al. 1999, Elinor Ostrom, et al., 2012; Gari et al, 2017)

¹⁷ Hardin G. The Tragedy of Commons, *Science*, Vol 162 (3859), 1243-1248

¹⁸ *Supra* note 8 Ostrum 1999

COMMON POOL RESOURCE (CPR) OF LACHEN AND LACHUNG VILLAGES, NORTH SIKKIM, UNDER THE DZUMSA SYSTEM:

‘Dzumsa system is a traditional administrative system of the Village Lachen and Lachung.’ The literal meaning of Dzumsa is to gather in a place.¹⁹ It is a ‘unique system of decision -making that affects not only natural resource management by also governs the livelihood activities of the Lachen and Lachung communities of the North Sikkim’.²⁰ It is also known as an Indigenous political system in which people allow social group to organize themselves, according to their own particular needs and circumstances.²¹ Dzumsa system is one of the oldest traditional tribal self-government systems unique to the Lachenpa and Lachungpa tribes.²²

CLEARLY SET BOUNDARIES:

Lachen valley is located within the Eastern Himalayas with administrative boundaries of North Sikkim District in the State of Sikkim. Lachen means ‘Big pass’ in the local Lachenpa dialect, inhabited by the Lachenpas who are dependent on livestock and collection of medicinal, aromatic edible plants.²³ Lachung means little pass connected to Mangan Town, which is the headquarter of the North District, inhabited by Lachungpas. Lachen and Lachung are reserved areas of the tribal community and the Indian Army occupies some portion of this region to protect the International border attached to Tibet. ²⁴ Every person which inclusive of the foreigner, Indian Citizen and people of Sikkim needs government passes as well as the Vehicle pass, to visit this region which are provided the by the Government of Sikkim. The passes to visit these protected area is issued by the State Government of Sikkim and through registered tour operators.²⁵ The Government of Sikkim provides several safeguard for ensuring land rights of the indigenous tribal communities that was implemented in the year 1897 and a foundation

¹⁹ Supra note 1 (Sabatier, 2003, p 96)

²⁰ Jain, N. (2007), Community conservation in the Sikkim Himalaya, Community Conserved Areas in India- a directory, Sikkim, Sikkim, p 631-639, 636

²¹ Supra note 1 (Sabatier, 2003, P 7)

²² Chettri, D.P (2013), Preserving cultural identity through tribal self-governance: The case of Lachenpa and Lachungpa tribes of Sikkim Himalaya (India), American International Journal of Research in Humanities, Arts and Social sciences, p1- 23, 7; Supra note 7 (Subba, 2008, p.267).

²³ Lachungpa, Indigenous lifestyle and biodiversity conservation issues in North Sikkim, Indian Journal of Traditional Knowledge, Vol 8 (1) January 2009

²⁴ Ibid (Lachungpa, 2009)

²⁵ Government of Sikkim Tourism and Civil Aviation Department <http://www.sikkimtourism.gov.in/Webforms/General/DepartmentStakeholders/DeptAwards.aspx>

for protection of land belonging to Bhutia and Lepcha.²⁶ In 1971, the government issued a notification termed as Revenue Order No 1, which prohibited the sale or transfer of land belonging to Bhutia or Lepcha to non- Bhutia or Lepcha without the permission of the State.²⁷ In 1954, the Land Revenue Department, Sikkim notification signed by Tashi Namgyal, the Maharaja of Sikkim reinforced the Revenue Order No.1 of 1917.²⁸ This notification has relaxed Revenue Order Number 1, which states that it is possible to obtain on lease land belonging to tribal people, but only after obtaining the permission of the State Government. This notification remained in force even after 1975 under special provisions of 371F of the constitution of India.²⁹ These notifications and order has not only safeguarded the land right of the community, but in case of Lachen and Lachung it has been an important factor for the protection of the CPR and has clearly set boundaries for the region.

HISTORY AND NATURE OF DZUMSA SYSTEM: DECENTRALIZED ORGANIZATION AND VILLAGE HEAD:

During the Monarchy period, Dzumsa system was a decentralized organization and guardian of the Lachen and Lachung village. The kings delegated authority to Pipons as a Village Chief who headed the Dzumsa system, they functioned under absolute independence and this became a major factor for the continued existence of Dzumsa system. The story of the Pipon Sonam Wangyal gives insight of the importance of Pipon in Palace administration under the regime of Sikkim's 11 Chogyal, Tashi Wangyal Namgyal. In the year 1940, the Pipon of Lachen was appointed as a representative of Sikkim for the enthronement ceremony of the Dalai Lama to Lhasa, the Tibetan capital. The Sikkim archived file for this trip illustrates the expenditure with meticulous recorded financial accounts of the trip to Tibet.³⁰ The Namgyal dynasty ruled Sikkim for 333 years and they coordinated with the Dzumsa and Pipon and delegated powers for better functioning of administration.³¹ Sir Colman Macaulay in his report describes his meeting with Pipon (Phipun), along with his observation on the role of Pipon, "The Raja appoints a man every year. The present man was appointed three years ago. The Phipun has no allowance, but he has a

²⁶ White, Political Officer Notice, 1897

²⁷ Revenue Order, 1917 Revenue order No.1 issued by C.A. Beli, Superintendent, Sikkim State, 1917, Gangtok, <http://www.sikkimlrdm.gov.in/lrd/CirNotf.html>.

²⁸ Land Revenue Department, Government of Sikkim, 1954 <http://www.sikkimlrdm.gov.in/lrd/CirNotf.html>

²⁹ Article 371F of the Constitution of India 1950 <http://necouncil.gov.in/sites/default/files/uploadfiles/371F.pdf>

³⁰ What does one gift to the Dalai Lama?, Endangered Archives, British library, 2017 <https://blogs.bl.uk/endangeredarchives/asia/page/2/>,

³¹ Chapter 1 General Background of Sikkim, p, 1-64, p-13 <https://shodhganga.inflibnet.ac.in/bitstream/10603/69112/3/chapter%201.pdf> accessed on March 10, 2020; Chapter III Democratic Decentralization in Sikkim : The Historical Setting https://shodhganga.inflibnet.ac.in/bitstream/10603/165835/11/11_chapter_03.pdf accessed on March 10, 2020

great deal of authority, as we clearly saw. He says the revenue paid to the Raja is a share of butter for each Yak and a blanket share of salt for each house...'.³² The British ruler bought major reforms in the administrative system of Sikkim and allowed the functioning of the Dzumsa system in these two villages of North Sikkim. Even, Sir J.D Hooker mentions the presence of a pipon Lachen and Lachung in 1854. Joseph Hooker is a noted botanist who traveled to the interior of North Sikkim including the mountain region and discovered many plants and animal life in the area. He also published the first study of the flora of Sikkim, 'Rhododendrons of Sikkim' in 1849.³³ J.C White the first political officer in this visit to these villages observed, "The two villages of Lamteng in the Lachen and Lachung valley have an unusual and almost communistic government of their own. On every occasion the whole population meets at 'Panchayat' or council, where they sit in a ring in a consultation...The consequence is everything is done deliberately and much time is wasted in useless discussion, but the system seems to suit the people and I allowed it to be continued with some modification"³⁴

Under the rule of the Chogyal Namgyal a formal body Block Panchayat was created as a result many customary tribal panchayat were integrated into Panchayat, but, the customary tribal panchayat prevalent in Lachen and Lachung was retained without any changes.³⁵ Until today, neither of the Acts or notification has abolished this Dzumsa system. After Sikkim's merger with India in 1975, the government adopted various measures to revitalize the grassroots democracy in the State. The Acts and notifications proposed the establishment of a formal decentralized governance system in the State, but none of these Acts called for the abolition of the Dzumsa system. The unique system of self-rule formed centuries back managed to survive for years and more. After the merger of Sikkim with India, the Dzumsa acclimatized with the democratic set up by the State and conducted first democratic election in 1978-79 to elect Pipon and twelve members every year through ballot voting. The candidates with the highest votes became the first Pipon and rests as elected members. The membership of Dzumsa was and is only open to Lachenpas and Lachungpas by birth.³⁶ In year 1993 the Sikkim Panchayat Act was passed in conformity with the Constitution of India (73rd Amendment) Act 1992, had no provision for the introduction of formal local bodies in these two villages of North Sikkim.³⁷ In year 2001, the State government of Sikkim recognized the customary tribal self-governing under the Panchayat Act. The Act provides that 'the existing system of the traditional institution of Dzumsa practiced

³² Supra note 3 (Maculay, 1885, P 55).

³³ Supra note 3 (Hokker, 1849)

³⁴ Supra 3 (White, 1909; Chettri, 2013, p 25).

³⁵ The Sikkim Panchayat Act 1965; Supra note 21 (Chettri, 2013)

³⁶ Supra note 1(Sabatier, 2013).

³⁷ Sikkim Panchayat act 1993

in the two villages of the Lachen and Lachung in the north district of the state shall continue to exist in accordance with the traditional and customary laws of the Dzumsa. Notwithstanding, other provision of the Sikkim Panchayat Act, the traditional institution of the Dzumsa existing in the village of Lachen and Lachung shall exercise the power and function as provided under the Act in addition to the powers and function exercised by them under the existing traditional and customary law³⁸. Dzumsa system is equivalent to gram Panchayat and hence the junior Pipon represents as Gram Panchayat and the senior Pipon as Zilla member, since there are two tiers in the Panchayat Raj System. The Post of the Pipon and Gyapon are equivalent to the Sabhapti and Up- Sabhapati of the Gram Panchayat. Unlike Gram Panchayat, it has tenure of one year and exercise more power and functions.³⁹ In addition to the power as Panchayat, the Sikkim State Legal service authority also appoints and nominates Pipon Lachung, Dzumsa and Pipon Lachen, Dzumsa as the ‘other member’ of the Taluk Legal Service Committee (Chungthang). The role of the Taluk Legal service committee is to provide free and competent legal service to the weaker section of the society and ensure that opportunities for securing justice for citizens with economic or other disabilities. ⁴⁰ The Status of Dzumsa system has evolved and recognized by the State Government as per the changing circumstance and livelihood of the people in Lachung and Lachen, intact with their core function of preserving and protecting common pool resource CPR.

STRUCTURE OF DZUMSA SYSTEM

Earlier, Pisons were nominated by a group of people called thenmi (or thosmi) meaning elderly people who were considered to be the most respected, honest and experienced member of the community. After the merger of Sikkim with India Dzumsa is an annually elected body of twelve village representatives. It is composed of two Pisons (Headmen), six Gembos (assistants to Pisons/ executive), two Tsipos (accountants) and two Gyapons (messengers). They represent the people of Lachen and Lachung, respectively, and manage resource utilization and conservation, pasture management for grazing, conflict resolution, social and community mobilization and traditional and local governance. ⁴¹ The Council of representative or the core

³⁸ Sikkim Panchayat Act 2001; Supra note 21 (Chettri, 2013).

³⁹ Law Department, Government of Sikkim Gazette Extraordinary No 409, 2001, Gangtok. <http://sikkimarchives.gov.in/gazettes/gaz%202001.pdf>

⁴⁰ State of Sikkim Legal Service Authority, Notification NO. 80/SLA/21, 2010 <http://sikkimarchives.gov.in/gazettes/gaz2007.pdf>

⁴¹ Tamang G.M, (2017) Chapter 11, Indigenous Method of conflict resolution in Sikkim, Ganga Maya Tamang, Legal Pluralism and Indian Democracy, Tribal Conflict Resolution System in Northeast India, Melvil Pererira, Bitopi Dutta, Binita Kakati, Taylor & Francis. Supra note 1(Sabatier 2013),

administrative member of the Dzumsa called Ihyena.⁴² An ad-hoc committee designated by the villagers consisting of seven members conduct the election and before the election all the former iheyana have to resign, closing all the accounts and wrapping up unfinished business, order a last common meal and submit the key of the Dzumsa house to the public, the Dzumsa House (mong-khyim) was built in 1984-85.⁴³

FUNCTION OF DZUMSA AS A COMMON POOL RESOURCE (CPR)

The function of the Dzumsa has evolved and multiplied after merger of Sikkim with India. It is an intermediary between the government and the people of Lachen and Lachung. The important characteristic and function of Dzumsa under Lachen and Lachung Village are:

Firstly, the Dzumsa functions under a clearly defined boundary as discussed above in Chapter III (i). The *CCPR of Lachen and Lachung* are the pastureland and livestock. The livelihood in Lachen and Lachung depends on Sheep, Yak and sheep grazing, their income depend on Cheese and yak butter, yak fur carpets.⁴⁴ Dzumsa system has a primary role to manage the patterns of grazing, cultivation, set rules and procedures for utilization of common pool resources. This interdependent relation between their livelihood, culture and nature has resulted in wealth of traditional ecological knowledge, which the Dzumsa system has acquired by experience and observation of the changing climatic conditions, biodiversity and livestock and this has necessitated the community to abide by the Dzumsa rules and norms.

Secondly, the Dzumsa system follows and fixes the appropriation rules, which restrict the time, place or quality of resource related to local condition. Dzumsa decides on the dates of migrating to new pastures as well the altitude below which they cannot graze so as to manage resources in grazing pastures, allowing enough times for grass in pastures to grow back over a season (summer) for winter grazing resources. They fix the time and the number of animals for each pasture. They also set the dates for fodder collections along and altitudinal gradient to give equal opportunity for all to put up their winter reserves. Dzumsa selects crop for different villages along different altitudinal levels to coordinate community level efforts and to give everyone time to repair fences that will protect crops from freely roaming livestock. Furthermore, this body

⁴² Surpa note 1 (Sabatier, 2013).

⁴³ Surpa note 21 (Chettri, 2013).

⁴⁴ Surpa note 21 (Chettri, 2013).

decides the dates for sowing and harvesting based on traditional knowledge to ensure a good harvest.⁴⁵

Thirdly, the Dzumsa monitor all the appropriation made under the set rules, they entertain all the complaints immediately and *fourthly* they operate under the collective choice arrangement, which means the individual affected by the operational rules can participate in modifying the operational rules. Dzumsa organizes meeting in a Dzumsa hall where an individual from each household participate to discuss and decide on the listed agenda before the Dzumsa. Dzumsa is responsible for all decisions and the general welfare of the community. It supervises all of the developmental activities of the village such as the administration of plantation, construction of drainage system and other developmental works and utilization of funds that come from the government. They are also authorized to collect taxes and fix prices for village product such as cheese, dry cheese, butter, incense and handloom products and vegetable product like potatoes and cabbage for which the people exercise collective choice arrangement under the supervision of the Dzumsa.⁴⁶

Fifthly, the Dzumsa system punishes the violator and rule breaker. They decide the cases in the meeting any violation of rules and regulations calls for punishments that are social prohibitions or fines or imposes taxes per animal on each household; they collect the amount and then channelize them towards the community development by Dzumsa. These funds are also available as Soft loan with minimum or no interest. In case of the disputes regarding the regulations, the disputants approach the Pison with a scarf and fee. Dzumsa organizes the meetings at a public hall known as Mongkhyim (Dzumsa house), where people meet to discuss and deliberate their problems and important business transaction concerning the welfare of the community.⁴⁷ During the meetings, they also take major decisions concerning village life. Such as, cultivation programs of sowing, harvesting and cutting hay from community pastures, grazing, seasonal migration and the distribution of government assistance.⁴⁸ Dzumsa for economic security also fix prices of livestock and livestock products to protect the poorer members of the society and to ensure equal distribution of money collected by the Dzumsa through fines, government contracts and other sources. These communities worship their

⁴⁵ Supra note 7 (Subba, 2009).

⁴⁶ Supra note 40 (Tamang, 2017)

⁴⁷ Supra note 21 (Chettri, 2013).

⁴⁸ Supra 40 (Tamang, 2017).

surrounding mountains or mountain deities, which makes them respect the natural resources and the environment.⁴⁹

Sixthly, the Dzumsa plays a vital role in regulating resource use in a way that prohibits over use and provides social, economic and environmental security to the people. Dzumsa is an intermediary between the people, States of Sikkim and other authorities of State and Central Government. The Dzumsa often organize sensitization programs that guide the People Lachen and Lachung.⁵⁰ Dzumsa also proposes collaboration with the State Government and the Government ensures to establish good relations and work in closely for improving the livestock of the Lachung and Lachen. Since, the region follows pastoralism and livestock for their livelihood. Dzumsa core practices and function is to act as a guardian of common pool resources. With the growth of tourism in Lachen and Lachung, Dzumsa System under the initiative of the Lachen Tourism Development Committee (LTDC) has combat the plastic pollution issue by organizing routine clean- up drives in order to preserve the common pool resource with efficient waste management program and ban on single plastic water bottles.⁵¹ Dzumsa as a guardian of Lachen and Lachung common pool resources is remarkable. The Dzumsa also organizes meeting of all people in Lachung and Lachen with Governor of Sikkim.⁵² The Pipon Lachen and Lachung notified the closure of region for local visitors and tourist considering the plausible threat and health crises in the region without undermining the threat imposed by COVID-19 (Corona Virus) around the world including India⁵³

Seventhly, Recognition of Dzumsa system by the State and Central authorities, the instances discussed above makes evident that the respective government and other authorities recognize the Dzumsa System rights, duties and power. The Dzumsa as a local institution has proved to be very sagacious while overcoming the adversities brought in by climate change and other calamities. State and Central authorities guides and abide by the communities rules and notifications to overcome the adversities in the region brought in by climate change. The

⁴⁹ Supra note 7(Subba , 2009).

⁵⁰ Strengthening yak husbandry in North Sikkim through, Technological intervention and input support by ICAR, 2009; Sikkim's eco- tourism evolution <https://www.greeneconomycoalition.org/news-analysis/sikkims-eco-tourism-evolution> Strengthening yak husbandry in North Sikkim through Technological intervention and input support by ICAR, <http://www.kiran.nic.in/StrengtheningYakHusbandry.html> (accessed on August 17, 2019).

⁵¹ Sayantan Bera, 2015; Waste free festival in the Sikkim Lachen Village sees hundreds of Visitors, 2016; The non-profit WWF's Khangchezonga Landscape program, 2018; Waste free festival in the Sikkim Lachen Village sees hundreds of Visitors, 2016; Sikkim's eco- tourism evolution, 2018 <https://www.wfindia.org/?15162/Waste-free-Festival-in-Sikkims-Lachen-Village-Sees-Hundreds-of-Visitors>

⁵² Governor Visits, Lachung Lachen, 2018 Governor visits Lachung Lachen, Tuesday, November 6, 2018 <http://www.sikkimexpress.com/NewsDetails?ContentID=22914&SectionID.>

⁵³ Supra note 6 (Corona Virus 2020)

structure of the Dzumsa - shows the how the Dzumsa - functions with proper appropriation, provision, strong monitoring and enforcement, conflict resolution and governance activities.

Eighthly, Dzumsa establish a favorable interrelation within the community by organizing activities shared by the entire social group, Dzumsa carry out judicial roles, intermediary roles between the different social strata and the government, society and monasteries, organized collective work undertaken for the benefits of the community as a nested enterprises. Therefore, the function of the Dzumsa system is akin to eight design principles and is a well-coordinated system for the people and by the people that function under multiple roles such as socioeconomic development, political and judicial. It is evident that Dzumsa System set a Paradigm of Community Pool Resource (CPR).

THE ADDITIONAL FACTORS FOR UNIQUENESS OF THE DZUMSA SYSTEM:

The additional factor for success and existence of the Dzumsa system are:

- a. Dzumsa follows a preventive measure: Dzumsa decides on the possible implication that might arise in harsh weather and changing geography of the region or use of the landscape for tourism. They impose extra vigilant measures and plan to overcome the scarcity of resources such as pasture for the livestock's and take plausible step to prevent foreseen calamities. This is the first factor for the success of Dzumsa system.
- b. Clearly defined boundaries with the special status of the Restricted and Protected area of Sikkim: The high altitude settlement and regional dialect ensure the unity of the community. This region has regulated access imposed by the Dzumsa System and monitored by the State Government, where the foreigner or citizen of India or people from other parts of Sikkim can visit only after acquiring registered passes to visit the place which is issued by the State Government. This special status accorded by the State and the geography of the region is definitely an important factor of success of Dzumsa system.
- c. Consent and active participation of the people of the community: This factor is the core foundation for efficient functioning of the Dzumsa system. Every activity from Grazing, livestock, social cause and waste management find its essence in consent and agreement among the member of the Dzumsa, Lachung and Lachen, respectively.
- d. Community solidarity: With the changing climate condition and landscape, this community has witnessed the harsh weather, limited common resources and the

necessity of combatting waste and crisis management with the determination to protect the common pool resource has built strong community solidarity.

- e. Voluntary compliance and execution: The community exercise exclusive rights and duty to protect common pool resources (CPR). The right and duty are a combination of elements voluntary compliance and use of fine for social welfare. Voluntary compliance of rules and order of the community through Dzumsa system and in case of excessive or lapses to abide by rules results in a voluntary surrender to the community imposed sanctions and fines by individual/ household.
 - f. Transparency: Dzumsa system decides and performs all the functions in the Dzumsa meeting, which implies openness, good communication and accountability of common pool resources and government funds.
 - g. Proactive Role of Pion: Pion, the head of the Dzumsa system performs a proactive role. He is an intermediary between the region/ community and the Government and other authorities. The people and the government respect the right, duty and special power of Pion. He holds a special status under the guardianship role in his community. He holds the responsibility to maintain the wealth of traditional ecological knowledge, acquired by experience and observation of the changing climatic conditions, biodiversity and livestock and encourage the community to abide by the Dzumsa rules and norms.
- These seven additional factors garland the uniqueness of the Dzumsa system, North Sikkim and set an example of a paradigm for a Common Pool Resource (CPR).

CONCLUSION

This paper shows a relation between the successful community approaches for the - common pool resource (CPR) which are forestry, grazing pastures, livestock. The community role as an intermediary between the community and the State and Judicial role as a village court, for imposing rules, fines and rewards. The major functions carried on by this community falls within the perspective of the Ostrum theory and principles. This paper shows a strong harmonization of the functioning of the Dzumsa Community with the Ostrum principles as a successful common pool resource.

Dzumsa system operates in a region accorded which special status as reserved area and special land rights protection to the settlers who are Lachupa and Lachenpa, since 1897 as discussed in chapter two, which clearly define the CPR boundaries. Dzumsa system adopts a dual

regulatory approach to CPR and household due to interdependency of the community in the CPR for their livelihood, which make each individual participate and deliberate on the appropriation rules. As a protector of the CPR, Dzumsa clearly lays down rules and agree to regulate the use of Common Pool Resource in Lachung and Lachen, such as rules for grazing time and pattern, tenders. They exercise collective choice arrangement, as Dzumsa is a group of people elected, or designated by the villagers to represent them, manage village affairs and use of common pool resources. It runs through collective will and arrangements made by the people for the people. All the individuals or household participate in modifying the operational rule, they modify and amend the rule as per the need and circumstances at the meetings. Dzumsa further monitors and regard enforcement as major function of the Dzumsa. They actively monitor and audit the use of the common resource pool and responsible to ensure application of the community regulations and punish the individual for inappropriate behavior. Dzumsa schedules the meeting for every decisions and issues direction only after meeting and discussing with the individual or household agenda placed before them. They discuss measures with the household member considering all the aspects and outcome of the decision. Hence, they actively monitor and audit the use of the common resource pool and ensure compliance, which accompanies sanction and fines, under their functions as Conflict resolution mechanism. As an intermediary between the people, States of Sikkim and other authorities of State and Central Government organize sensitization, an awareness program and workshop for the benefit of the community as discussed in Chapter 3. The State government has recognized and regularized the functions of Dzumsa, which is a nested enterprise as proposed by Elinor Ostrum will sole control on the appropriation, monitoring, enforcement, conflict resolution and governance activities like any other nested enterprises. The additional factors for uniqueness of Dzumsa system adds to the remarkable function of the Dzumsa system of Lachen and Lachung for 171 years and more and sets an example of a Paradigm for Common Pool Resource (CPR).

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