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Community, Craft and Culture: Learning Resilience from the Ziro Valley

[Saurabh Tewari, Namperumal Sridharan, Rama Umesh Pandey,
Anand Wadwekar]

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Community, Craft and Culture: Learning Resilience from the Ziro Valley

Saurabh Tewari, Namperumal Sridharan, Rama Umesh Pandey, Anand Wadwekar

Abstract: This case study discusses the potential to advance the tenets of resilience thinking; socio-economic, cultural, and environmental, in the next paradigm of urban resilience. The Apatani cultural landscape from the Ziro Valley, where people live in harmony with nature and culture, has immense potential to serve to the urban resilience discourse. The framework of community, craft and culture through the integrated practices and continuums in the Ziro Valley offers opportunities to look into and evolve the next paradigm. The case study illustrates some of the cultural threads associated with everyday living such as identity, structures, community decisions, festivals, harmony and gender. It then discusses the stresses at different scales and components. Through this study, the tenets of urban resilience become visible on the threads of human conditions, design and social interactions which can add to the literatures of the site and the subject at large.

1 Introduction

In the contemporary geographies of the Global South, there are specific contexts which have been able to retain their temporal and spatial knowledge systems of living and evolution. The knowledge systems include the inherent and integrated practices of resilience along with the ways of living aligned with the various forms and acts of nature. The examples derived from this case study have the potential to advance the tenets of resilience thinking; environmental, socio-economic, cultural; in the next paradigm of urban resilience. They underline the role of community values including the gender, interface between the dominance of resilience, habitat and design in one of the towns-settlement of India's bordering state of Arunachal Pradesh, Ziro which inhabits the indigenous population of the Apatanis.

This study is a scholastic attempt to add and redefine the mutating concept of resilience through delineating the indigenous practices of community, craft and culture at various scales/forms in the selected site.

2 Emerging Concepts on Resilience

Resilience is an emerging way of framing responses to uncertainties. Across the world, national and local governments, intergovernmental organisations, financial institutions, and charitable organisations are taking initiatives targeting urban resilience to climate change and natural disasters (Friend, 2017). Its famous predecessor, the concept of 'sustainability', talks about linear and circular



Figure 1. Hapoli Town in the Ziro Valley. Source: Authors

processes and long-term consumption. In contrast, discourse on resilience has come up with new ideas on networks, self-renewal and survival. In its updated form, resilience as a concept is more dynamic, non-linear and cross-linked, complex, and embraces uncertainty (Stumpff, 2013).

Within the literature, the systems-based approach to the urban sphere is a common theme. The city as a system has remained an enduring metaphor in urban studies (Friend, 2017). In a systems view, resilience is the ability of a system to respond to predictable disturbances as well as unforeseen shocks (Deeming, 2017). Further, on the view, Ernston et al. (2010) suggest that a city is never to be seen as a singular entity but rather as a locus of multiple networks of relationships at different scales. Social networks are constructed by societies as a form of alignment or coordination to allow different people to understand each other through a continuous communication

process. The technical networks of a city are held together through these social networks.

With this, in the prevalent literature, Social-Economic theories have been criticised for downplaying the contested nature of social interactions and the ‘wicked’ complexity of society-nature interactions (Deeming, 2017). It is often the most vulnerable social groups who also live in the most hazardous environment. So, in this case, study, we intend to look into the technical and social networks as structures, in community, craft and culture. The idea is to expand the literature by adding more structures (also, networks) which are locally cultured and historically conditioned.



Figure 2. Ziro's location. Source: Authors

3 Research Setting and Approach

Within the new development narrative of India, there has been a renewed political focus on its North-East. The region's vulnerability and adaptability to the process of development remain a complex research subject to many actors dealing with the development policies and planning, vis a vis social, cultural, economic and environmental risks in the context. Along with the emerging ecological challenges, with a majority of the indigenous population in the region, there are tangible and intangible threats to the continuing practices, traditions and lifestyle. Often, these practices, which have a deep relation with nature, are also contextually sustainable. The indigenous knowledge systems in the region, too, showcase a proven record of holistic resilience.

3.1 The Site: Ziro Valley, Arunachal Pradesh

From the region, the Apatani cultural landscape of the Ziro Valley (Figure1) from Arunachal

Pradesh offers opportunities to look into the various aspects through its integrated sustainable practices and resilient continuums. It features itself in the Tentative list of UNESCO's World Heritage Site (UNESCO, 2014) for its outstanding cultural practice.

The Ziro valley is situated in India's North-East largest state Arunachal Pradesh (Figure 2), bounded with Bhutan, China and Myanmar. Though geographically it is nearer to the state capital Itanagar, traditionally the trade connections have been through North Lakhimpur, a geo-politically strategic district on the banks of Brahmaputra in the state of Assam. The valley has limited connectivity with the capital, Itanagar, and other parts of Arunachal Pradesh and Assam. The Ziro town is a class IV town with 12,806 population (2011 census) in the Lower-Subansiri district. It has two major urban settlements viz—old Ziro and Hapoli (commonly known as New Ziro) as shown in Figure 3. The land parcels in between the two urban areas comprise agricultural land with a network of century-old settlements.

These settlements have now started showing urban characteristics and are slowly transforming themselves, which also gets

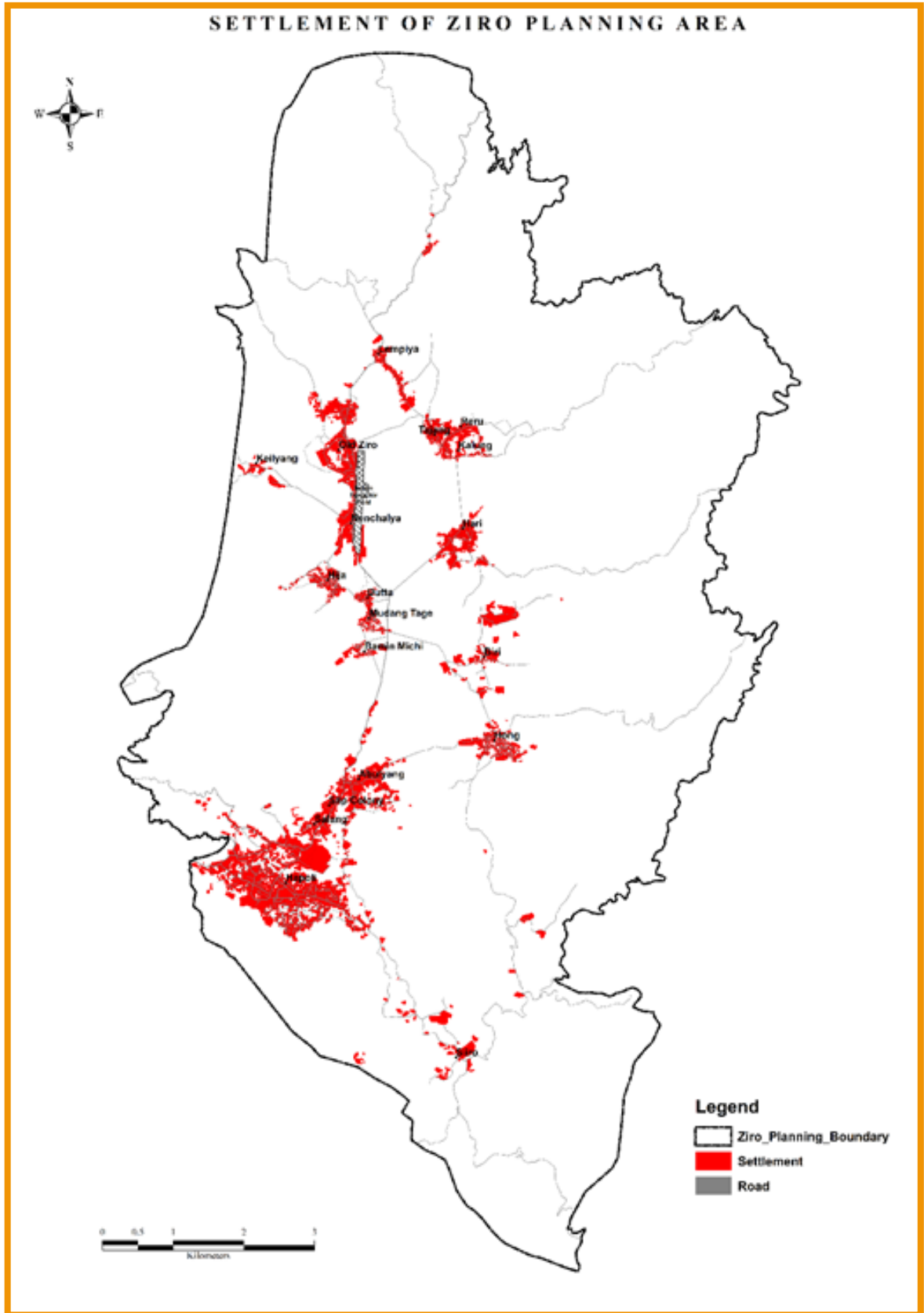


Figure 3. Ziro Planning Boundary and Settlements
 Source: Ziro Local Planning Authority

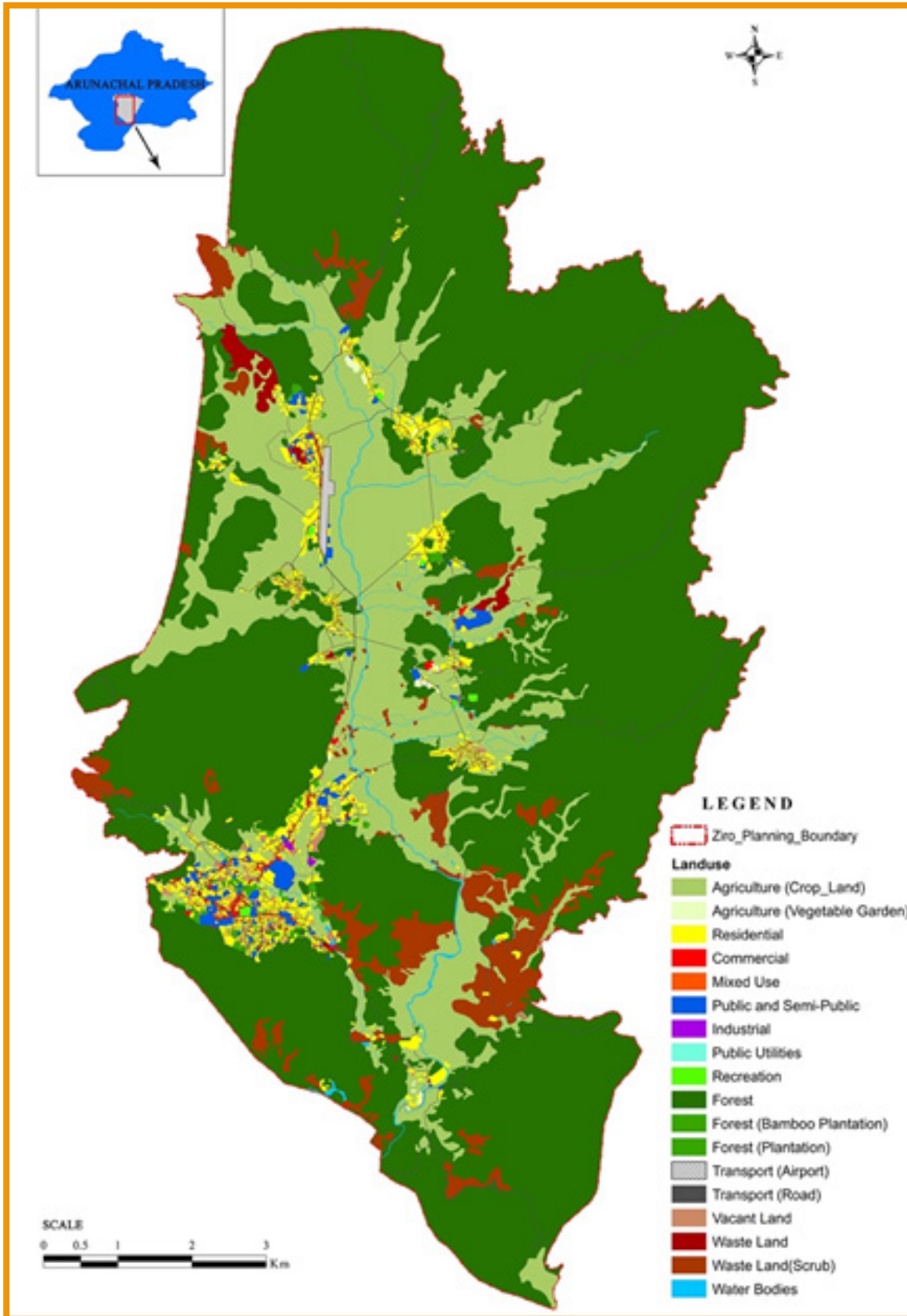


Figure 4. Land Use Plan of the Ziro Planning Area,
Source: Ziro Local Planning Authority

reflected in the new built fabric as well as occupation.

“The Apa Tanis constitute a separate endogamous community with its territory, language, customs and traditions, and an economy fundamentally different from that of all the other tribes of Subansiri region.” - Haimendorf, 1946, Page 23

At a glance, the Ziro valley reminds the way of primordial living. However, on a more in-depth investigation, it reveals the broader interactions of human-nature-culture with a concern of care and deep empathy for most of its actors. The dominance of forest and agricultural land within the planning boundary of Ziro, as shown in Figure 4 further indicates the possibility of human and nature interactions. Whether it is the use of sustainable materials in building housing units or the unique agricultural practice, the valley has an array of examples to offer a holistic case study of urban resilience. The social-environmental-cultural nexus can offer a probe for the next paradigm.

3.2 Methodology

The four authors who represent an extensive multidisciplinary epistemology; design studies, urban & regional planning, architecture & urban design, and environmental planning; analysed the case study through an interdisciplinary lens. The case study employed qualitative methods involving multiple layers of engagement with the site and its actors. The indigenous and continuing resilient practices of the Ziro Valley are documented. These practices are further analysed for their contribution in advancing to the next paradigm of urban resilience, focusing on the cultural aspects. The case study identifies the key takeaways which can be applied or investigated in a generic context.

A renowned anthropologist in the region introduced the site and its culture to the authors. The first physical interaction included a local academic assisting the group in understanding and interpreting the site by geographically, historically and cultural information. Necessary documentation and discussions with the local experts, gatekeepers of tacit knowledge groups, government officials, political/stakeholder groups and women/older people primarily to address gender focus groups through co-exploration helped the authors to orient their queries. The foundational literature (Rana, 2012; 2012a, 2018) oriented towards a socio-cultural-technical system mapping of collected data and articulation in a progressive scale of objects, spaces, communication and systems.

4 The Framework: Community, Craft and Culture

For the ease of comprehension, the case study here illustrates some of the practices which showcases the values of urban resilience through articulation in two positions; craft and community. In the real experience, these two positions overlap and link through the third entity, the culture. The idea of this articulation of two positions, craft and community, is to explicitly highlight the role of culture, gender and livelihood in integrating the two and tease out the resilience tropes by exploring the scales, forms and nature of the systemic practices within site. The culture is holistically considered here in Apatani identity, historicity and unique practices.

4.1 Community

It is at the intersections; community spaces take shape in Ziro valley. From hamlet to the major arteries, community spaces are spread across the areas which play essential roles. The small spaces and platform within community residential areas are essential for community purposes such as meetings and customs. 'Lapang', is a sacred wooden platform made during tradition community festivals marks the strong community hierarchy all along with the poles and door signs each family residence. The second tier of spaces are mixed, one where both small scale commerce and residential functions coexist, and the third tier consists of spaces with the main artery of the hamlet or town. As the 'community' relates to a group of people living together in a same or networked place, the three levels: **shelter, settlement and systems**, explore the tangible and intangible forms of values, attitudes and interests.

4.1.1 Shelter: Design Vocabulary, Materiality and Process

The design of a typical shelter in the valley is based on not just physiological or security requirements as seen with urban environments but also the social aspects of community living

through eco-friendly material while addressing anthropometry, thermal comfort, and storage. As most of the building material is sourced from the vicinity, including bamboo groves and forests, traditionally no foreign material was used in its making. The ingenious use of bamboo as a structural base, surface planes, and interface material provides the housing units, as illustrated in Figure 5 with a unique identity. However, the recent past has witnessed an influx of modern building materials like glass, steel and concrete, and has changed the architectural built forms in the community.

The rooms in a typical house are typically built around a common room containing a centrally located fireplace, known as 'oogu', and storage hanging above it from the ceiling. 'Oogu' is a crucial component of a typical living room as the members and/or outsiders sit around this fireplace in a particular hierarchical way. Most of the household activities, including cooking and eating, are practised around this space. The living room is attached to a small bedroom sufficient for a small nuclear family. As the family expands, the older generation moves out, gifting the old house to the eldest son and daughter-in-law.

The houses in the valley are constructed on the stilts to align with the climate of the region. The elevated height varies from 1-2 meters to resist

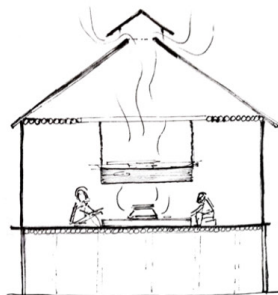


Figure 5. An Apatani house in the valley and sketch of a typical section with the heating system
Image Source: Authors, Sketch Source: M Des students of School of Planning and Architecture, Bhopal



Figure 6. Community Space with lapang. Source: Authors

the poisonous insects and natural disasters like flooding due to heavy rain. Domesticated animals are reared in this space. The lower level of elevated shelters houses the pigs, who are fed by organic waste from the family.

The building process of a new house in a settlement involves a traditional community design process where the villagers assist in building an individual's house as voluntary labour. All the work-hours by various individuals are meticulously registered. Conventionally, the contribution is returned in the future in a similar or equivalent form. The Ruskinian concept (Gandhi, 1956) of bread labour appears to be in operation here, through the traditions, as it values human labour over the mechanical options available in contemporary times.

4.1.2 Settlement: Pattern, Segregation and Transitions

Apatanis live in dense village settlements with each nuclear family having their own house. Though the houses follow a row-housing pattern (Figure 6), their houses do not share common walls. The intentionally designed gap is made to resist fire hazards. It allows the community to dismantle a house, in part or whole, and quickly rebuild in case of any disaster. At a broader level, there is a segregation of housing and grain-storage units. This distance is also there as a resilience strategy to any natural disaster like fire or floods.

The village settlements in the Ziro valley connect through a network of woods and forests along with the most agricultural lands. The high fences of bamboo often manifest these transition

between human settlements and the forest (as Morye Bije) or agricultural lands (as Ukko Bije) (Hana, 2018). These fences are made up of a unique straight stemmed male bamboo (*Phyllostachys*) grown in the valley, which stands up well to the cold winters with seasonal snow (Haimendorf, 1946).

4.1.3 Systems: Agriculture

Practices of agroforestry, along with cultural and traditional customs, makes the Apatani landscape and settlement pattern very unique. The Apatanis are known for their judicious utilisation of limited land areas that evolved out of century-old experimentation (UNESCO, 2014). The hutment area constitutes a tiny part of larger intertwined and complex ecology and landscape around it which makes it not only integrated with the functioning of the ecological system but also a significant part of the interdependent organisation.

The forms of women empowerment and self-sufficiency are visible in the fields of Ziro Valley. The Apatanis tend every square yard of his land with loving care and the most exceptional ingenuity and do not practice shifting agriculture, unlike surrounding tribes.

“The agro-ecosystems are nourished by nutrient wash-out from the surrounding hill slopes. Nutrient loss with crop harvest is replaced by recycling crop residues and the use of organic wastes of the villages so that soil fertility is sustained year after year.” - UNESCO (n.d.)

Through the years, Apatanis have developed a unique, organic method of rice cultivation with gentle tilling, sans chemical fertiliser. It primarily involves the women-force (Figure 7) executing most of the agricultural processes on the field. Ajis, the paddy fields, is irrigated

through the canals and channels connected through a network of adjoining fields.

For Apatanis, the field is a sacred space. The women, as guardians, do not let even an inch of unwanted pest or weed in the paddy fields. All the work on the field is without any animal labour, ploughs or any substantial machine assistance. Only small instruments like iron hoes, digging sticks and wooden batons are used. The tillage method is primitive and a unique feature of the system. The conscious and continuing decision of keeping away any external force on the site displays a sense of deep care to maintain the quality of the soil in the adverse climatic situation. The judicious and efficient use of water and a thought for the quality of soil and connected ecosystem manifests the care for natural resources.

The rice produced in the field is primarily for domestic consumption. However, it is sold or bartered whenever there is surplus production. The agricultural and food system is mostly self-sufficient with traditional barter exchanges with the tribes around. Apatanis' understanding of ecology is impressive as they are relatively critical about change and adaptation of foreign technology. With this, their stance towards methodological aspects of innovation is open.

Pisciculture got introduced with rice farming during the post-independence period of the sixties by the government. The experiment of breeding fish with paddy became a massive success for its productivity, and it did not compromise on the quality of either yield. As the climate is suitable for its production, another innovation, a contemporary one, has emerged in the Kiwi cultivation. As a mounting viable commercial option, it is now being embraced and promoted by the local entrepreneurs.



Figure 7. Women in the rice fields Source: Authors

4.2 Craft

Craft, through its definition, involves a tacit process of making objects, mostly through a low-technology human intervention. Beyond the tangible cultural visuality, there are intangible aspects which are embedded in its production, which may include the eco-sensitive sourcing, ethical labour and organic processing. The Ziro valley has a variety of craft practices addressing the human needs of the inhabitants. Be it preparing food, making clothing and everyday products, a sense of craft is omnipresent, physically and methodically, and like agriculture, it is an integral component of sustainable livelihood.

4.2.1 Textiles

The textile from the valley is easily identifiable among its typological cousins from the region. As the craftsperson, mainly women, have been continuing the age-old design traditions,

including the making of stoles, shawls and skirts. They are involved (Figure 8) from the beginning of the creation process to its final outcome. Since the raw material Cotton's production has not been feasible due to unfavourable climatic conditions of the Ziro valley, the source material is often procured as a barter from the surrounding communities or bought as a commodity. The women, traditionally, prefer it to spin to create threads on their own and engage another layer of association with the crafting process.

Along with the source material, the colouring to has primarily been organic with the local herbs acting as the natural colour agents and dyes. For its making, the 'chichin' (loin loom) has been an acceptable option to create textile among the craftsperson. Chichin's cost, availability and usability have been the factors for its popularity. Interestingly, crafting the components of chichin has also been a part of the local craft traditions.

The local initiatives, including the self-help groups under the formal structure, DIC

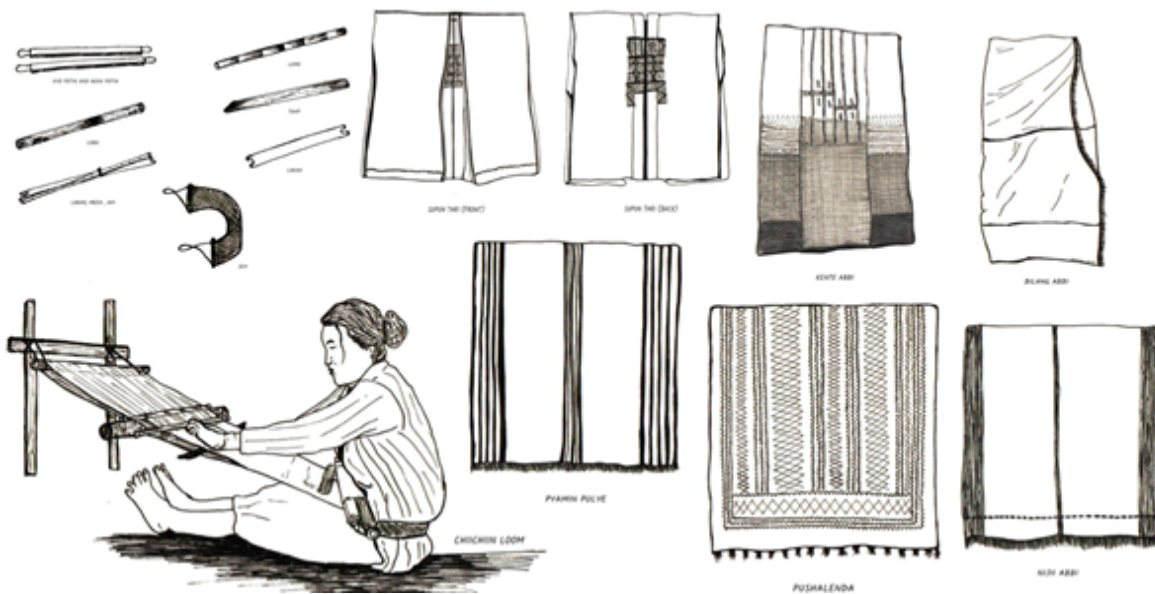


Figure 8. Textiles in the Ziro Valley
Source: M Des students of School of Planning and Architecture, Bhopal



Figure 9. A craftsman making a basket. Source: Authors

Arunachal Pradesh, have been addressing the external demands. The touristic demands have propelled the innovation. However, the local groups have addressed the changes without compromising on the values of its production. The making process, its sociality and its output; colours, textures and patterns of the new designs and garments have primarily been the same. In a self-sustaining clothing system, the sustainable idea of khadi is very much visible in the textile practices of Ziro valley, and the local government initiatives and NGOs have been carrying it forward.

4.2.2 Everyday Products

Be it everyday utensils like *sudu* (tumbler) or *pakho swin* (tong), or utilitarian equipment such as *puniyo* (spatula), storage such as *yadin*, the material application of sustainability as bamboo is omnipresent in the Apatani living systems. Furniture items are also present. Bamboo's suitability and applicability, for the housing and building material, is its most utilitarian aspect. The bamboo remains the integral aspect of Apatani economics. The efficient use of bamboo as a ready material for a range of everyday craft products, furniture objects and building material

in the Ziro valley aligns with the philosophy of sustainable living. The practice of using bamboo, here a local material, aligns with sustainability principles.

5 Understanding resilience through mapping the culture

5.1 Role of Culture

With the discourse of sustainability as the predecessor and SDGs forming its backdrop, the Urban Resilience discourse has now entered into its third-generation, Socio-Ecological Resilience (UN Habitat, 2017). However, the role of culture is still waiting to be underscored through case studies. At present, the state of the resilience literature is highly institutionalised through formal agencies and actors; there is an opportunity to put forward the indigenous knowledge systems in the state of the art. These indigenous cases can unfold unique logics and reasons to understand the broader

continuums of resilience thinking manifested through cultural practices of the community, including craft. These cases can also address the complex aspects of urban resilience, including informality, human-environment relationships, gender and power relations.

5.2 Cultural Threads

The Apatani cultural landscape exhibits threads of resilience in its living, and livelihoods interfaces from the shelter, public spaces to the practices of craft and agriculture. Some of the threads are explained briefly here:

5.2.1 Identity and Structure

With a shared sense of identity, Apatani, individual freedom, too is visible in their community living experience. When the world is fighting over the choices of faith, the Apatanis have demonstrated an exceptional composure in dealing with the conceptual conflicts of different religious practices, even within a nuclear family. The traditional faith of Apatanis, Donyi-Polo, and the relatively newer faith, Christianity is bonded by the traditional customs and rituals which most individuals in the community follow. It is common to have people following different faiths within a family. A series of focussed group interviews which was conducted with the key stakeholders and elders from the community revealed the importance of Apatani identity. It collectively overrides the minute differences in the existing practices. The subscription to common, traditional and overlapping world-views, though theoretically different at instances, has been bridging the differences historically.

5.2.2 Community Decision

No central or one single person locally administers Apatanis living in the seven villages of the Ziro valley. It is the council of elders, bulyan, in each village which facilitates most of the decisions related to the community. On occasions, the council may consult with elders from the other villages. The system is reminiscent of Gandhian utopia of decentralisation and gram swaraj (Gandhi, 1962).

5.2.3 Festivals

The annual festival, Myoko, which is hosted by three groups of villages across the valley every third year, displays not just cultural continuum, but also the excellent organisation skills of villagers. The festival is also the time when inter-village friendships advance further. This forging has a history in traditions like Bunu Ajin, where families help each other in times of adversities and celebrate together in good times (Bida, 2018). It is continued hereditarily and forged further through customs like exchanges of gifts during Myoko. The unique inter-village bonding manifests the integrative nature of society and boldens the idea of communal unity.

5.2.4 Harmony

The regional immigrants in the valley, mainly settled in the Hapoli area, have gelled well with the local people and customs. The thriving commerce in the local market is its strong evidence along with the promptness in learning each other's language, and customs has facilitated this process. The Apatani beliefs beyond their living spaces have negotiated peacefully in public spaces with most immigrant

traders. Here, Hindi, popular throughout the state of Arunachal Pradesh, acts as the link language. On the other hand, immigrants have also picked up descriptive words and phrases. The virtues of urban resilience, of respecting all religions and diversity, and Hindi as the link language, is visible in the everyday exchanges in the Ziro valley.

5.2.5 Gender

The festivals of the Apatani tribe are closely intertwined with agricultural processes. Right from the sowing to harvesting, they celebrate on the excellent yield. Agricultural activities are the domain of women with no involvement of menfolk. The economy of the Ziro Valley being predominantly agriculture-based, highlight the importance of women in making the urban areas sustainable and resilient. The way the water is managed for both agriculture as well as cultivating fishes (discussed in section 4.1.3) can become an exemplary practice for places having a similar terrain. Though some of the educated women have now shifted their occupation to the service sector, many continue with cultivation engaging fellow women labourers for the fieldwork. Women in some of the households, where spouses are engaged in well-paying jobs, also confirmed hiring labourers for the fieldwork. However, the majority of the women irrespective

of their age group contribute to cultivation. School going children and students on vacation (studying higher education in other cities) were also seen contributing their bit in the fields.

The decadal growth rate in the population of Ziro shows an increase in numbers of females in comparison to 2001. This highlights the out-migration of male members which gets further corroborated through the rising sex ratio. The sex ratio has increased from 960 in 2001 to 1006 in 2011 (Directorate of Census Operations, Arunachal Pradesh, 2011) pointing towards demographic dominance of women. This gets further highlighted through the presence of a higher percentage of women in the categories of cultivators and household industries (Table 1). However, the literacy rate shows gender disparity.

5.2.6 Resource Management

One can see the judicious use of land is also visible in residential hamlets where small front gardens and bamboo farm backyards form the basic unit of the morphology of the town. The strategically placed granary as a detached unit is another way how the Apatani community safely stores grains while ensuring getting not affected by water and fire through its design. These age-old practices show the community's approach

Gender	Total Urban Population	Decadal Population Growth (2001-2011)	Literacy Rate	Categories of Workers (Percentage)		
				Cultivators	Agricultural labours	Household Industry (Handicraft)
Male	6383	48.82	80.53	36.25	5.18	1.23
Female	6423	52.54	68.08	57.30	8.32	1.72

Table 1: Statistics highlighting the importance of Women in Ziro Valley
Source: (Directorate of Census Operations, Arunachal Pradesh, 2011)

towards developing independent systems too along with interdependent one.

The resource management of other commodities through trans-local exchanges, in the case of textiles and other food resources, is exceptional. The exchange, along with community contribution, defers any stress on the local resources and also facilitates cultural harmony in the region.

5.3 Cultural Stresses

As Urban resilience generally refers to “the ability of a city or urban system to withstand a wide array of shocks and stresses” (Leichenko, 2011), we first look into some of the visible threats in the valley. An integrated assessment of Environmental, Socio-Economic and Cultural aspects relating to the stresses is the following table:

Table 2: Stresses at different scales and components of resilience in the Ziro Valley

If not addressed at this stage when the Ziro valley is transforming due to development activities under various government mission, may adversely affect the existing cultural resilience.

6 Epilogue: Learning Resilience

The Ziro valley houses the layers of tacit anthropological systems: from periodic religious practices to a community designed interaction spaces, from continuing craft traditions to self-made habitat spaces. Manzini and Thorpe (2018) argue, to withstand and recover from present crises, and to prepare for foreseeable

future ones, our societies should improve their cohesion through strengthening different kinds of social forms. The case study showcases how community, craft and culture exhibit cohesion in the cultural forms through a timeless way of life.

As the International developmental policies such as the UN SDGs, the Paris Agreement, etc. are increasingly adopting the language of resilience in their discourse (Friend, 2017), the aspects of community, craft and culture through its integrated practices and continuums in the Ziro Valley offer opportunities to look into and evolve the next paradigm in the resilience discourse. The voice finds an echo in the emerging inclination of ‘resilience thinking’ towards acknowledging plurality and investigating interconnections and interdependencies within and beyond cities (UN Habitat 2017, pp. 9).

The World Urban Forum (2020) declares the conviction that ‘culture is an integral part of the solution’ and reinforces it in its several points relating to identity, heritage, creative industries, innovation, and sustainable urbanisation. It further suggests, “investing in retaining the practices, knowledge and culture of Indigenous peoples and use this for improved urban & territorial planning including environmental protection”. So, the culture remains critical to the cases of development in the indigenous community landscape. Therefore, as exhibited in various scales and components in the case study, beyond learnings for the others, the Ziro Valley and the related action groups have to introspect to learn resilience from its own culture or cultural practices of community and craft for its future course of resilient development.

Finally, with the subscription to material progress, the world seeks empathetic and sustainable solutions to move forward, to address conflicts and dichotomies of human existence. In its present form too, the Apatani cultural landscape from the Ziro valley where

Scale	Component	Stress
Community	Shelter	<p>The shift to modern material like cement, concrete, and glass is removing the dependency on the local material.</p> <p>The use of modern material and technology erases the whole shelter co-building approach practised by the community and also alter the age-old spatial-visual tendencies of the people.</p>
	Settlement	<p>The intra-community exchanges are decreasing. The unique zoning, including grain storage, are vanishing.</p> <p>The built structures over natural drains are blocking the passage of rainwater which is leading to waterlogging in Hapoli (New Ziro) mainly along the roadside.</p> <p>The rampant cutting of hills for the construction of the road through the forest may in future lead to landslides. Of late, fire accidents are also being reported in forests, which locals attribute to negligence by the tourist. Thus, the influx of tourists is also posing a threat to the pristine forests of the valley.</p> <p>Hierarchy of spaces – from the individual- intrapersonal-to community are always under change because of the invasion of new communication and mobility advancements such as mobile phones, cars, and scooters.</p> <p>Community's network with the broader state resources and urban population outside the valley region will have both desired (such as efficient transport, time optimisation, economic networking) and undesired (inflow of people, an increase of pollution level, overexploitation of tourism potential) consequences in terms of socio-spatial nature of the settlement and therefore need a community-oriented as well as driven planning policies.</p>
System		<p>With the shifting demography and migration, ecological thinking and wisdom are limitedly transferring to the next generation as it is done through hands-on practices on the field.</p> <p>The self-sufficient and intra-community exchanges are languishing. There is a high probability that it will lead to an adverse effect on systems.</p> <p>The subscription to external material systems has made the community dependent on modern commercial means.</p> <p>Ecology-community network is under constant pressure because of unchecked civil construction additions, roads.</p>

Craft	Textiles	The decreasing number of practitioners of craft are degrading the state of craft knowledge and its eventual consumption within
	Everyday Products	For a society, which practised the barter system till the mid of the previous century the materialist shift to modern state economy has brought in complex transactions. Degrading human relationship with nature, as the modern alternatives now replace the traditional everyday objects and practices
Common Traits		Changing livelihoods has directly influenced the traditional and community wisdom, e. g., the new generation is less aware of the practices like traditional agriculture, building construction and craft practices. The decreasing number of practitioners of craft are degrading the state of craft knowledge and its eventual consumption within An increase in artificial and non-organic products at various levels creating product life-cycle issues Degrading human relationship with nature, as the modern alternatives now replace the traditional everyday objects and practices Threats of globalisation/colonisation of modernity: Vanishing indigenous identity Indigenous people perceive missionary invasion as a threat to their culture. It has a significant influence on eating habits and festivities.

Table 2: Stresses at different scales and components of resilience in the Ziro Valley

people live in harmony with nature and culture has immense potential to serve as a case study for many urban resilience projects. The case study illustrates some of the aspects associated with everyday sustainable, and resilient living. The tenets of urban resilience are visible on several other threads of human conditions, design and social interactions too, which can add to the text from the Ziro valley.

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