

A stylized map of South Asia is centered on a dark blue background. The map is white and surrounded by various colorful icons representing different aspects of the region's culture and environment. These include a blue bird in flight at the top, a blue elephant on the left, a yellow and red bird on the right, a yellow and red fish at the bottom right, a yellow and red tree at the bottom, a yellow and red cloud at the bottom left, a yellow and red building at the bottom left, a yellow and red wind turbine at the top left, a yellow and red sun at the top right, a yellow and red mountain at the top left, a yellow and red river at the bottom right, a yellow and red field at the bottom right, a yellow and red forest at the bottom right, a yellow and red city at the bottom right, a yellow and red industrial area at the bottom right, a yellow and red agricultural area at the bottom right, a yellow and red natural area at the bottom right, a yellow and red cultural area at the bottom right, a yellow and red historical area at the bottom right, a yellow and red modern area at the bottom right, a yellow and red future area at the bottom right, a yellow and red vision area at the bottom right, a yellow and red hope area at the bottom right, a yellow and red dream area at the bottom right, a yellow and red aspiration area at the bottom right, a yellow and red ambition area at the bottom right, a yellow and red goal area at the bottom right, a yellow and red purpose area at the bottom right, a yellow and red mission area at the bottom right, a yellow and red vision area at the bottom right, a yellow and red dream area at the bottom right, a yellow and red aspiration area at the bottom right, a yellow and red ambition area at the bottom right, a yellow and red goal area at the bottom right, a yellow and red purpose area at the bottom right, a yellow and red mission area at the bottom right.

SOUTH ASIA
AS A SUBCONTINENT
OF BIOCULTURAL REGIONS:
THE VIEW IN 2100

SOUTH ASIA BIOREGIONALISM
WORKING GROUP

South Asia as a Subcontinent of Biocultural Regions: The View in 2100ⁱ

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The Setting

At the end of the first quarter of the 21st Century, in response to the multiple intersecting crises the world was engulfed in, global movements for radical alternatives with diverse regional manifestations were gaining ground. Amongst these were various forms of biocultural regionalism – reconnecting and sustaining ecological and cultural flows across artificial political boundaries, to reverse ecological collapse, heal cultural, religious and other rifts, enhance traditional and new dignified livelihoods, and move towards greater social justice. This is the story of how this unfolded in South Asia, from then to now.

This region, tied by the monsoon from the mountains to the sea, lies south of the Himalaya and north of the Indian Ocean, Arabian Sea and the Bay of Bengal, while being bound on the west by the Hindukush range, and on the east by Arakanyoma and Naga hills. These geographical and climatic limits have given rise, over millennia, to one of the world's richest mosaic of ecoregions and tapestry of cultures.

Over thousands of years of history, South Asia has seen many empires come and go. Both peaceful as well as conflictual encounters over centuries within this region, and between it and its neighbours, have defined the overall social tapestry as well as political boundaries. In the early 2000s, where our narrative begins, the region contained within it the

nation-states of Bangladesh, Bhutan, India, Nepal, Pakistan, Maldives and Sri Lanka. They adjoined Iran, Afghanistan, China/Tibet and Myanmar; and in some instances, they remained politically unsettled with frozen border conflicts for many decades.

While borders may often be the peripheral margins to those at the centre of nation-states, to those living in their vicinity (especially in a heavily populated region such as South Asia) they are “home”. There are strands of family, cultural and economic relations that transcend such hard boundaries which were primarily the results of an imposed, extractive pre-colonial imperial and colonial order. The everyday lives of people therein have always been defined by the immediate hydro-geo-ecological realities that their socio-cultural fabric had adapted to, thus making the hard political borders somewhat porous at the grassroots and informal economy levelsⁱⁱ. The adoption of the ethos of biocultural regionalism has allowed foregrounding what mattered more to them in their everyday lives, thus promoting more wholesome local-to-regional interactions.

Such an ethos has also re-centred nature in human decision-making, rekindling our relationship with and within it, enabling the flourishing of all life forms.

Transformations, and how they came about

As we look back from our vantage point in 2100, we see some dramatic transformations in South Asia. This is especially so for what were once hard borders, between Pakistan, India, Nepal, Bhutan, Sri Lanka, Bangladesh, and Maldives. These borders were the consequence of the region's pre-colonial and colonial history. While sometimes porous at the grassroots and informal economy level, the border demarcations had artificially bifurcated common ecological regions and made trade as well as cultural interactions and economies such as nomadic pastoralismⁱⁱⁱ more difficult. As communities and peoples in these regions realised the negative cultural, ecological, and economic consequences of these hard borders, and the need for local-to-regional cooperation for a population of 2.4 billion^{iv}, they adopted more biocultural approaches connecting communities and eco-systems, lands and seas. Amongst the most instructive of these, which gave rise to lessons for the whole region, were people-to-people cooperation in times of disasters across Nepal, India and Bhutan borders^v.

Consequently, borders have become porous, needing no visas to move cross the sub-continent. This process began in the late 2020s, with a comprehensive mapping of the biocultural regions of South Asia. This was based especially on river basins and watersheds, mountain ranges, contiguous ecosystems and agroecological zones. This process also drew strength from the collective memory of lived realities and public records about

biocultural regions known by diverse names, such as, ilaka, aanchal, chak. – that existed prior to the colonisation of the subcontinent^{vi}. Advocates of biocultural regionalism used the latest technologies to undertake hydro-topographical mapping, and create multi-layered maps combining knowledge of deep and recent history of geography, human settlements, biodiversity, and other details of eco-systems. The centrality of the monsoons to every aspect of life in South Asia was at the heart of framing strategies to adapt to its changing patterns due to the climate crisis. Like the rest of the world, in the 2030s, South Asia moved into emergency

actions for mitigation and adaptation. By the 2040s, with the biocultural regional approach gathering momentum, ground-level actions towards porosity of political boundaries^{vii} were substantially put into place, including several actions given below. Over the next few decades, this porosity steadily increased, though not without periodic setbacks, which had to be resolved through institutional processes of dialogue and peace-building.

There was even a growing recognition that political boundaries need to be somewhat fluid, especially where they coincided or overlapped with rivers and marine areas. This happened partly due to natural

factors – such as the impacts of climate change and failure of earlier strategies to 'manage' rivers. Many rivers have a tendency to change course, a tendency that human systems have unsuccessfully tried to 'tame' through embankments. Many of

As communities and peoples in these regions realised the negative cultural, ecological, and economic consequences of these hard borders, and the need for local-to-regional cooperation for a population of 2.4 billion, they adopted more biocultural approaches connecting communities and eco-systems, lands and seas.

these embankments were finally dismantled or abandoned as a failed strategy by the 2030s. As the climate crisis accelerated, causing a rise in sea levels and thus changes in coastlines, policy makers were compelled to adapt more flexible governance patterns based on a greater understanding and appreciation of a biocultural regional approach



These shifts were partly based on, and in turn further accelerated, the increasing demand for localised decision-making. This grew out of many decades of struggles of local communities to claim more direct decision-making power, towards the concept of radical democracy based on local rootedness. South Asia has a long history of relatively autonomous communities – most notably in the form of Adivasi (Indigenous) self-rule in parts of central India, or communities in the Himalaya where colonial and post-colonial state domination was not so prevalent. As the biocultural regional approach became more widespread, this process also led to a boost to existing, or regeneration of weakened, traditional governance systems in the Himalaya and North-east parts of the sub-continent^{viii}. These systems were based on a recognition of collective territorial rights and responsibilities. To some extent these had been reclaimed by communities in India under the Forest Rights Act in the 2010-2030 period, as also other approaches like Community Forestry in Nepal. These laws or policies became a precursor for models of governance which fostered a federated approach, connecting diverse areas and enabling institutional mechanisms of biocultural

regional governance. Pressure from diverse social and cultural movements ensured that these shifts in governance also significantly reduced internal inequities of gender, caste, ethnicity, and other divisions that once led to uneven power and benefits. Robust community systems of dealing with disease and crime with a focus on prevention and practices of restorative justice, have also reduced the fear of transboundary transgressions, one of the reasons for strict visa regimes.

Through all this, local communities have taken over most of the governance in what were nation-state boundary areas, armed forces having been withdrawn as peace-building intensified from the 2030s. This includes:

- Declaration of *shanti abhyaranyas* (peace reserves) in previous conflict zones like Siachen, the Kachchh and Thar deserts, and the Sundarbans.
- In the Palk Strait, fishing communities from both India and Sri Lanka are empowered to ensure sustainable, peaceful use of marine and coastal areas; the same for the mangrove ecosystem of the Sundarbans across India and Bangladesh, and the Lakshadweep Sea between the Lakshadweep Islands in India and the Maldives (see Box 1 below, on Marine Biocultural Regionalism in South Asia).
- The Greater Rann of Kachchh, and other desert, wetland and coastal areas stretching across India and Pakistan, are managed by ecologically sensitive nomadic pastoral, fisher, and other communities, which once seemed to be in decline but were revitalised by the return of new generations since the 2030s.
- In the Greater Thar, communities of livestock herders in both India and Pakistan have been similarly empowered for self-governance.
- The festering boundary dispute between Nepal and India at the trijunction of Nepal-India-China,

which is the origin of the river Mahakali/Sarada, has been solved by incorporating other adjacent areas of India and China, to create a three-nation peace reserve^{ix}.

- The Himalayan and trans-Himalayan regions across India, Nepal, Pakistan, and Bhutan have been recognised as biocultural regions, and are managed peacefully by mountain communities with various forms of self-governance and federating, building on existing initiatives here and elsewhere in South Asia (as referred to above). From the 2030s onwards, considerable people's pressure and mass movements including assertion of self-governance, and the realisation of a lasting peace was conducive to well-being for all, over a couple of decades, led to both India and China relinquishing their political and economic domination over this region, and rather extending a helping hand where necessary.

The serious challenge of the climate crisis, which was a cause of water and land conflict in many of the nation-state boundary areas during the 2030s' and 40s', is being tackled through diverse, inter-connected practices of adaptation and mitigation. In those decades, several million people displaced from coastal areas had to be accommodated further inland, leading to intense conflicts over resources, and ethnic tensions. Innovative methods of increasing productivity of the land, decentralised manufacturing and other livelihood options were introduced, building on the combined base of traditional and contemporary knowledge and technologies of both residents and migrants, to enable higher densities of people to become sustainable. Constant processes of inter-faith and inter-ethnic dialogue and bridge-building went hand-in-hand with all the above.

By the middle of the twenty first century diverse communities, which had been caught in bitter conflicts in the twentieth and early twenty first century, were able to choose a political future beyond conflict. This was partly a result of the increasing questioning of the nation-state as a political formation, noting that while it has provided

certain benefits to 'citizens', it has also divided humanity and the rest of nature, intensifying hostile competition and conflicts. By the mid-21st century, there was growing recognition of the identity and uniqueness of 'peoples' and cultures of South Asia. Intrinsic to this cultural richness has been the existence of simultaneous and multiple identities which fostered a sense of common (and diverse) purpose. Historically, there were periods in which the governance machinery tilted towards identity-based domination of some communities. By the mid 21st century such governance withered as people with people at different levels of society asserting their interconnectedness with each other across landscapes and seascapes. Such recognition was fostered by determined and arduous processes of dialogue and bridge-building, as mentioned above.



Subsequently, these initiatives gradually dissolved narrow nationalism, and replaced it by civilizational identities more focused on cultures of swa-sabhyata, a 'self-ethnicity' based on civic values that encourages respect of and mutual learning between different civilizations and cultures. **The once hard-bound boundaries** between religions, faiths, and ideologies were thus replaced by more porous ones, enabling significant cross-pollination. This in turn enabled the strengthening and integration of ethics of equity, plurality, solidarity – as a way of life. In order to do this communities and civil society groups drew as much on South Asia's long history, and continuing practices, of syncretic traditions and co-existence^x, as on the 21st century versions of humanism and cooperation. These processes

were also driven by the material crises of the mid-21st century which made co-existence based on intense dialogues and experiments in shared living, a survival imperative for all. Of course, this does not mean that differences and conflicts have vanished and perfect harmony prevails across South Asia. But the dominant trend of tensions that existed in the early 21st century is being overtaken by that of mutual respect and interdependence.

The serious challenge of the climate crisis, which was a cause of water and land conflict in many of the nation-state boundary areas during the 2030s' and 40s', is being tackled through diverse, inter-connected practices of adaptation and mitigation.

One of the most dramatic transformations has been the removal of obstructions to the free flow of several rivers. This includes the decommissioning of dams and barrages, especially along the main stems of major rivers, with smaller water storage facilities shifting to decentralised upper tributary regions. This was progressively done for all rivers where restoration of free flow is essential for them to carry out their crucial functions as collectors and drainers of water. Where possible and without disturbing ecological functions and wildlife (especially without destructive dredging!), or displacing river-dependent communities, sensitively managed river navigation has also been promoted, and indeed has become another reason for freeing rivers of obstructions. Over the course of decades, special attention was given to rivers flowing across the once hard-borders of nation-states, such as Indus/Sindhu/Singhe Khababs, Ganga and its tributaries, and Yarlung Tsangpo/Brahmaputra.

These actions resulted in loss of power and irrigation capacity, but this was compensated through decentralised energy and water sources. This included not merely solar photovoltaics but also other forms of renewable energy which were unknown even in 2025. Similarly, decentralised water management, which once focused primarily

on networks of small ponds, became increasingly sophisticated in crafting ways to increase ground water recharge followed by judicious and wise use of water for human production systems. This included progress in demand management, which meant elimination of luxury and wasteful consumption. This significantly reduced individual and community footprints, and thus made water available to more people on a more equitable basis. Governance of river basins has also been radically transformed to enable community-led and federated decision-making. These changes were based both on learning from traditional practices, that were better tuned to the fluidity of riverine and coastal areas, as well as wise use of modern technologies. These processes fed into, and in turn were fed by, the rise of local self-governance as mentioned above.

Movements to free rivers of obstructions like dams have been based not only on the biocultural regional perspective, but also the growing movement to recognise the rights of nature. Specifically, in the case of rivers, this began as an argument to recognise rivers' right to freedom – as nature intended before some humans in their hubris decided to place obstructions across them. The concept of nature having rights had been established in some parts of the world in the early 21st century, including through judicial pronouncements in India and Bangladesh. But in South Asia, it has also been combined with more ancient worldviews of respect for all life, so it did not get stuck in formal legalistic regimes, but rather was manifested in complex and diverse forms that continue to evolve well into the 22nd century.

Indeed, countless humans and diverse ecosystems have benefitted from trans-boundary elements of nature and resources in the region – like water, forests, migratory species – being increasingly brought under biocultural regional frameworks of governance. Communities have increasingly learnt, or revived from traditional ways of being, how to communicate with the rest of nature, to enable various forms of 'earthy governance' in which the voice of other species plays a crucial part – thus ensuring sustained wellbeing of all.

Continuing ecological collapse caused the extinction of several species by the mid 21st century, despite all attempts to stem their decline. But simultaneously, populations of several animal species that were in decline due to blockages in their migration and



movement patterns or the effects of the climate crisis, began to revive. The absence of human-made barriers and community-led conservation has aided the process of ecological regeneration and reconnections. Among those that are now thriving: Gangetic dolphins, hilsa fish, otters in the rivers freed of dams and diversions; several cat species in the Sundarbans and the contiguous forest areas of north-east India, Myanmar, and Bangladesh; snow leopard, markhor, red panda, musk deer and many other mountain species in the transboundary Himalayan landscapes; dugongs, sea turtle species, and others in the marine/coastal areas between India, Sri Lanka, Maldives and south-east Asia; and Great Indian bustards and other endemic bird species in the desert areas across India and Pakistan^{xi}. Similarly, plant species that were once threatened by fragmentation of habitats or other factors, have made a come-back in several biocultural regions; this includes species of pitcher plant like *Nepenthes khasiana* and orchids like Red vanda (*Renanthera imschootiana*).

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Overall, now, old and new forms of land/water-based occupations including those mentioned above, are thriving across the subcontinent. While in the early 2000s, there was a serious decline in most of the above traditional occupations, as also those related to crafts, this began to be reversed as younger generations saw in them an opportunity to both earn a decent living as also be creative in their production systems using traditional and new technologies^{xii} combining land-based, manufacturing and service occupations, and establishing lively relations with consumers. This also provided a major thrust to sustaining or reviving ecological and cultural connectivity across

landscapes and seascapes, since these were the foundations of thriving livelihoods.

These changes were facilitated by positive changes in patterns of agriculture of different kinds – farming, fisheries, pastoralism. There was a widespread shift away from the biocidal, chemical-intensive, homogenous systems that dominated in the early 2000s, towards more diverse, locally adapted, small-land-holder based approaches that are in tune with the characteristics of the agro-ecological zone they are located within. These shifts succeeded in prioritizing domestic food security of the producer families and food sovereignty amongst farming communities, channelising surpluses to localised markets with links to regional markets, through a combination of mechanisms, including producer-consumer networks. They also reduce the water and energy footprint of their products, providing the same benefits with significantly reduced ecological impacts. This, in turn, renewed and revived positive feedback links with natural ecosystems and wildlife populations. Some of this restored best-practices from the pre-Green Revolution age of traditional agriculture, but it also included contemporary innovations. Cultural diversity relevant to such agriculture is being sustained or revived, especially through growth of ethnic restaurants, local festivals, and the promotion of local cuisines and recipes dependent on local produce (e.g. dryland crops such as millets).

In the late 20th century, there was evidence of the younger generation in nomadic communities wanting to give up that way of life and many did indeed do so. However, newer forms of nomadic life with its many subtle cultural features, combined with livelihood opportunities including community-led ecotourism and a renewed sense of adventure, attracted the next set of generations back. This was benefited greatly by the withering away of militarised borders.

One of the fundamental paradigm shifts was the one that discounted nature and human labour and skill, and paid excessively to finance and technology. This balance was gradually brought about by general understanding of the true cost of extraction and pollution, and the true value of nature and labour. Soon parity between industrial and agricultural goods happened as a logical next step. Premium on manual skills of working with and for nature reflected in people's earnings and livelihoods and shifted focus of the youth. All of this

was accompanied by the disruption of centuries old global pathways of extraction from villages and forests for cities and exports to richer countries, with a gradual reduction in long-distance trade in primary goods such as food, minerals and metals.

As a result, towns and cities in the border areas (as also across the subcontinent) have become much more mindful of their energy and materials consumption and waste output, and the impact of these on surrounding or far-away rural areas. Over several decades, they have transformed towards more localised production of basic needs like energy and housing, and built mutually beneficial relations with surrounding areas for food, crafts, household needs, water. Large metropolitan cities, once believed to be unchangeable, gradually reduced in size as more and more people found livelihoods in peri-urban and rural areas.

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Localisation of the economy in the digital age took on varied forms. While it reduced the need for basic needs to be met from far-off places, trade of goods that was still necessary, found more sustainable modes of transport. Overall, a balanced approach to livelihoods, education, health and other needs that emphasised local physical access along with appropriate digital methods, has significantly reduced the need for migration or daily long-distance travel.

Box 1

Marine Biocultural Regionalism in South Asia: A Retrospective from 2100

At the dawn of the 21st century, South Asia's marine ecosystems were often treated as mere economic zones—divided by arbitrary borders, overexploited for resources, and neglected in broader ecological discourse. The terrestrial bias of early biocultural regionalism left the oceans fragmented, undermining the health of coastal communities and marine biodiversity alike.

The Fall of the Commons and the Rise of Open Access Chaos

For generations, coastal communities had managed their near-shore waters as customary commons, governed by local norms that ensured sustainability. However, the post-Independence push for modernization, coupled with state-enforced open-access regimes, erased these traditional boundaries. The seas became a free-for-all, where possession—not stewardship—dictated resource use. The race to exploit led to reckless overinvestment in fishing fleets, skyrocketing fuel consumption, and plummeting catches. Small fishers were bankrupted, while fish stocks dwindled.

By the late 21st century, South Asia had come to terms with a fundamental truth: its marine ecosystems could not be sustained under the extractive, industrial models borrowed from temperate regions. The legacy of destructive fishing technologies—particularly bottom trawling—had pushed coastal fisheries to the brink by the early 2000s. These methods not only caused ecological collapse but also dismantled centuries-old systems of decentralized, community-governed fisheries that had thrived along the coasts of India, Sri Lanka, Bangladesh, and Pakistan.

The Turning Point: Banning Trawling and Reviving Vernacular Practices

The tide began to turn as fisher movements across the region gained strength, demanding an end to ecologically catastrophic practices. Following Sri Lanka's lead, India, Bangladesh, and Pakistan banned trawling within their Exclusive Economic Zones (EEZs). This bold move paved the way for a renaissance in low-impact, renewable-energy-powered fishing techniques—seasonal, selective, and scaled to the tropics. Crucially, it also revived the pre-colonial model of biocultural regional fishing, where village-based fleets operated within ecological, rather than political, boundaries.

The turning point came when nations recognized that ocean currents, migratory species, and underwater ecosystems paid no heed to political boundaries. Collaborative governance replaced competition, with fisheries, coral reefs, and mangrove forests managed as interconnected systems rather than national assets. The Bay of Bengal Biocultural Region and the Arabian Sea Ecocultural Region emerged as frameworks for cooperation, where India, Bangladesh, Sri Lanka, the Maldives, and Pakistan aligned policies to protect shared waters.

Case Studies in Biocultural Regional Recovery

- Palk Bay: From Conflict to Collaboration: The cessation of trawling allowed the Palk Bay—once a contested zone—to be recognized for what it always was: a single, semi-enclosed biocultural region. Fish stocks rebounded across trophic levels, and the return of the dugong signaled the recovery of seagrass meadows. India and Sri Lanka, no longer locked in a destructive race for dwindling resources, cooperated on seasonal fishing calendars and gear restrictions, ensuring shared prosperity.
- The North Arabian Sea: From Hostility to Harmonization: The fiercely competitive fisheries between India and Pakistan underwent a remarkable transformation. Fisher unions on both sides negotiated sustainable fleet sizes, adopted an annual fishing calendar, and shifted to selective gear like gill nets and hook-and-line methods. By treating the north-west Arabian Sea as one interconnected biocultural region, they maximized yields while minimizing conflict.
- The Sundarbans: A Federated Model for Climate Resilience: Even as rising seas threatened the mangroves, the newly formed Sundarban Maṭsyajibī Samiti (Sundarbans Fishers' Federation) emerged as a model of biocultural regional governance. This decentralized, village-led network managed not just fisheries but the entire mangrove ecosystem—balancing human needs with ecological restoration. Their adaptive strategies, rooted in traditional knowledge, helped mitigate the worst impacts of climate change while preserving biodiversity.

Critically, marine biocultural regionalism also addressed equity. Small fishers, once displaced by industrial trawlers, regained stewardship rights, while regional treaties ensured that plastic pollution and offshore drilling were tackled collectively. The Indian Ocean's monsoons and currents, once seen as mere weather patterns, became the connective tissue of a new ecological identity.

The South Asian marine recovery demonstrated that sustainability required more than just technological fixes—it demanded a return to place-based governance, where ecological boundaries, not political ones, dictated resource use. By re-centering small-scale fisher communities, reviving customary stewardship, and embracing biocultural regional cooperation, the region showed that even the most degraded seas could heal—if humans remembered how to belong to them, rather than simply extract from them.

Increasing democratisation of society brought creative and participative innovation to many vital sectors, including science and technology, media and communications, education, and tourism. The rise of people's movements pushed back the profit-above-people culture and led to the ascendance of the open-source approach in all spheres of life. This meant that profit, or rather revenue, became the means not the end goal of business. In turn, this fostered forms of learning and education that emphasize creativity, joy and community/nature-based and appropriate open-source digital methods, and public media. This collective shift toward equity and ecological sensitivity ensured even the most advanced innovations, including artificial intelligence, mirrored society's growing attentiveness to diversity and historically excluded voices, and the need for all sectors to be focused on public good in ecologically sensitive ways. Every field embraced what was necessary for a biocultural regional approach.

While a general set of well-being indicators (qualitative and quantitative) has been adopted across the subcontinent, each biocultural region also has its own additional or granular set, suitable to its own ecological, cultural, economic context and specificities. In the Himalayan context, for

instance, the health of glaciers and springs is included, whereas in the coastal areas it is the health of the mangroves, littoral forests and/or coral reefs. There is also greater cross-cultural expression of the fundamental values and ethics that are embedded in (or emerge from) the transformations towards biocultural regionalism (see Box 2 below).

The rise of people's movements pushed back the profit-above-people culture and led to the ascendance of the open-source approach in all spheres of life. This meant that profit, or rather revenue, became the means not the end goal of business.

Finally, it is vital to state that all of the above are works in progress. Indeed, there is constant evolution as persistent old problems continue and new challenges come up.

Box 2

Ethics and Values of Biocultural Regional Approach

Embedded in the transformation towards a biocultural regionalism in South Asia, have been an evolving set of ethics and values, including the following, all of which are expressed or named in different ways across the subcontinent^{xiii}:

- Well-being of all, human and other species
- Nature and knowledge as commons, not private property
- Equity and non-discrimination
- Intergenerational human rights for individuals and collectives.
- Respect for right of nature to thrive, flow, regenerate, including recognition of sacred spaces and scapes
- Freedom for all, with the responsibility to desist or limit one's actions so that freedom of others is not compromised
- Pursuit and exercise of power with, rather than power over
- Embedding all economic activity within ecological limits
- Ecological and cultural interconnectedness and relationships across political boundaries
- Pluralism and diversity of knowledge systems, cultures, religions, languages, cuisines
- Learning as a life-long activity, rooted in ethics and values of biocultural regionalism
- Self-reliance for basic needs in localised economies
- Priority to an economy of caring and sharing, with a stress on reciprocity, resilience, regeneration and adaptability
- Universal engagement with and access to political decision-making
- Food and energy sovereignty at local levels
- Ensuring basic needs for all, while restraining consumption to sustainable levels promoting sufficiency and simplicity
- Creativity, joy, and innovation in all activities

Timeline

South Asia's Biocultural Regional Journey to 2100



► Early 2000s

Hard political borders divided shared ecological regions, though grassroots and informal economies kept some cross-border cultural and economic ties alive.

► 2010s - early 2020s:

Seeds of biocultural governance: Greater assertion of direct democracy, collective territorial rights through laws (e.g. India's Forest Rights Act and Nepal's Community Forestry); Rights of Nature jurisprudence; and cross-border disaster cooperation (e.g. Nepal-India-Bhutan)

► 2020s:

Global movements for radical alternatives gain traction, as do narratives on biocultural regionalism and border porosity in South Asia. Biocultural mapping begins (basins, ranges, agroecological zones), combining new tech with traditional units (ilaka, aanchal, chak).

► 2030s:

Embankments on rivers begin to be dismantled or abandoned. Armed forces begin withdrawal, and shanti abhyaranyas (peace reserves) begin to be declared in former conflict zones like Siachen, Kachchh, Thar, Sundarbans. Cross-border community-led governance is initiated for Palk Strait, Sundarbans, Lakshadweep, Rann of Kachchh, Thar, and Himalayan areas. The Nepal-India-China Mahakali/Sarada trijunction dispute is resolved by creating a transboundary peace reserve.

As sea-level rise displaces millions, climate mitigation and adaptation steps are enhanced, and intense resettlement initiatives are put into place, while resolving resulting conflicts between climate refugees and local hosts, through enhanced livelihoods & interfaith dialogue. There are setbacks, but managed through institutional peace-building.

► 2040s:

Significant porosity of borders being achieved, through federated governance and people-to-people cooperation. Visa-free movement across S. Asia is normalized. Restorative justice is adopted to prevent fear of transboundary crime and diseases. India & China relinquish their centralised domination and shift to supportive roles for border porosity and community governance. Dams and barrages are decommissioned, especially on main stems of major rivers - free-flowing rivers are restored without destructive dredging. Decentralised renewable energy offsets reduction in dam-generated capacity. Adoption of wiser water systems helps curb waste and meet demands.

► 2050s onwards: —————

Nation-state identity loses primacy; “Swa-sabhyata” (self-ethnicity) emerges as a civic, plural identity. Faith, ideology, ethnicity borders grow porous through dialogue and shared living experiments. Bioregional and Rights of Nature movement taking precedence and enabling free flow of rivers. Ecological reconnections help in revival of threatened species, ecosystems and migratory patterns, with communities centering “Earthy Governance” and integrating voices of rest of nature.

Traditional livelihoods (pastoralism, fisheries, crafts) regenerate, attracting youth with new livelihoods like community-led eco-tourism. Agriculture shifts to diverse, low-impact, food-sovereign systems linked to local markets.

Marine biocultural regionalism matures with: Palk Bay co-managed by India–Sri Lanka fisher cooperatives; Bay of Bengal Biocultural Region & Arabian Sea Ecocultural Region formalized; North Arabian Sea jointly governed by India–Pakistan fisher unions; Sundarbans federated fishers’ network sustains mangroves and livelihoods; Regional pacts on plastic pollution & offshore drilling; bans on destructive fishing (e.g., trawling) enforced and vernacular, low-impact fishing revived.

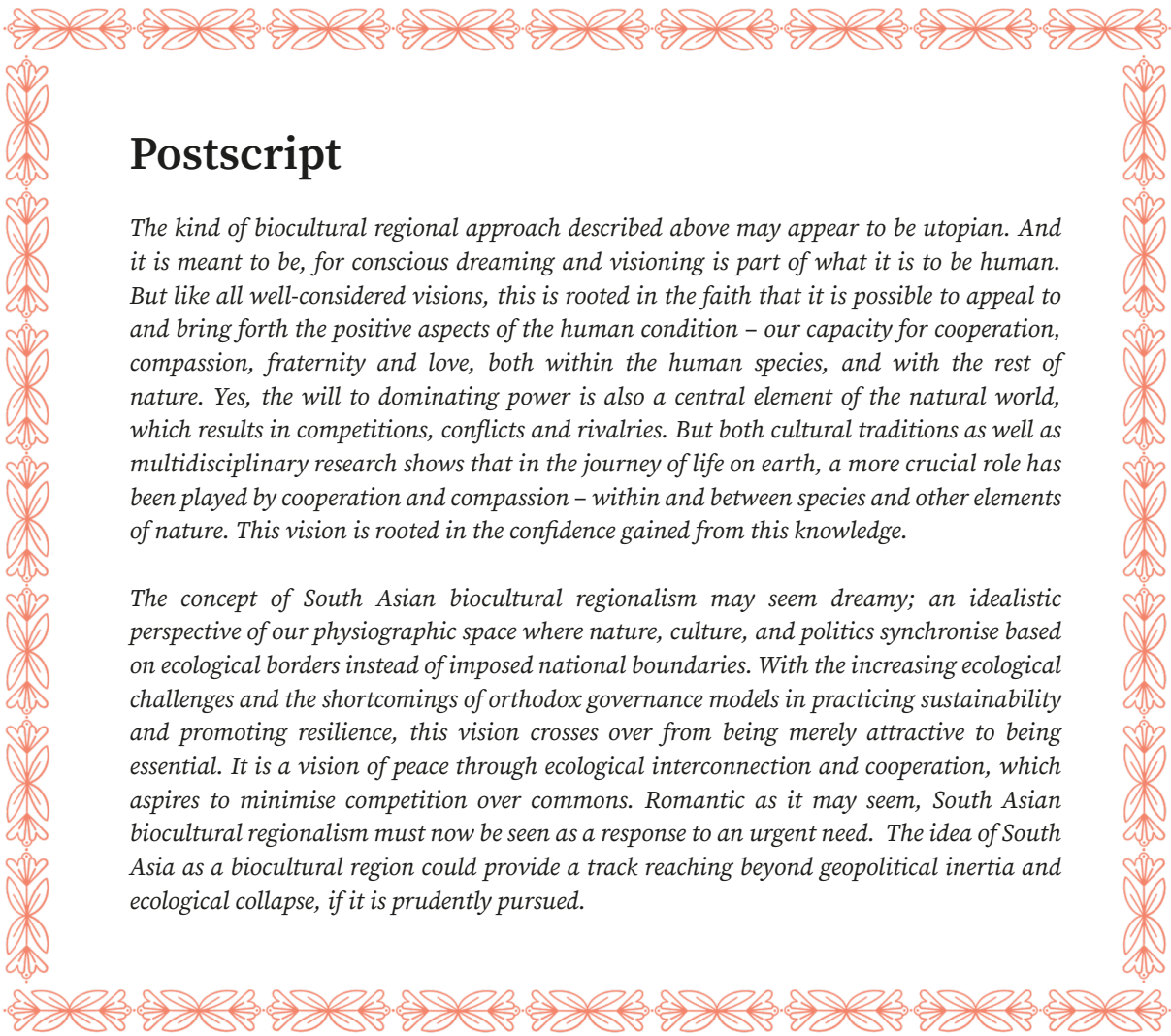
Open-source & community-oriented innovation dominates science, technology, education, and media. New technologies like AI are aligned to equity/diversity and public good. Urban centres reduce size and ecological footprint; peri-urban/rural economies thrive. Localisation of production reduces long-distance trade; sustainable transport adopted for essential exchanges. True-cost valuation gives parity between industrial & agricultural goods, and a premium on manual/nature-linked skills.

Well-being indicators are adopted, tailored by ecological and biogeographical zone. Cultural and ecological interdependence embedded in governance, livelihoods, and education. Rights of nature are recognised across all biocultural regions, integrated with ancient respect-for-life traditions.

► 2100: —————

South Asia functions as a network of interconnected biocultural regions, with fluid political boundaries aligned to ecological flows. Shared governance across landscapes and seascapes sustains equity, diversity, and regeneration for humans and other species. Challenges remain - transformation is an ongoing process, through cooperation, compassion, and reciprocity forming the base of regional relations.





Postscript

The kind of biocultural regional approach described above may appear to be utopian. And it is meant to be, for conscious dreaming and visioning is part of what it is to be human. But like all well-considered visions, this is rooted in the faith that it is possible to appeal to and bring forth the positive aspects of the human condition – our capacity for cooperation, compassion, fraternity and love, both within the human species, and with the rest of nature. Yes, the will to dominating power is also a central element of the natural world, which results in competitions, conflicts and rivalries. But both cultural traditions as well as multidisciplinary research shows that in the journey of life on earth, a more crucial role has been played by cooperation and compassion – within and between species and other elements of nature. This vision is rooted in the confidence gained from this knowledge.

The concept of South Asian biocultural regionalism may seem dreamy; an idealistic perspective of our physiographic space where nature, culture, and politics synchronise based on ecological borders instead of imposed national boundaries. With the increasing ecological challenges and the shortcomings of orthodox governance models in practicing sustainability and promoting resilience, this vision crosses over from being merely attractive to being essential. It is a vision of peace through ecological interconnection and cooperation, which aspires to minimise competition over commons. Romantic as it may seem, South Asian biocultural regionalism must now be seen as a response to an urgent need. The idea of South Asia as a biocultural region could provide a track reaching beyond geopolitical inertia and ecological collapse, if it is prudently pursued.

ⁱThis note builds on a visioning exercise carried out at a meeting of the South Asia Bioregionalism Working Group held in Bhopal, on 6-7 September 2024; and on the chapter 'Looking back into the future' of *Alternative Futures: India Unshackled*, by Ashish Kothari and KJ Joy. It has been drafted by Ashish Kothari with inputs from Dipak Gyawali, Sonam Choden, Rajni Bakshi, John Kurien, Amena Bal, Sujatha Padmanabhan, Sehjo Singh, Namrata Kabra, Chiranjibi Bhattarai, Uttam Lal, Pranvendra Champawat, Srija.

ⁱⁱThe High Himal sheep and yak transhumant herders between Tibet/China and Nepal, have traditionally travelled to highland pastures on a rotational basis for grazing their sheep and yaks, and for trade in herbs, salt and other goods. While hard borders have disrupted this practice, there is an arrangement for this practice to continue to within 30 kilometers of either side of the border.

ⁱⁱⁱNomadic and transhumant herders, spread across India, Nepal, Bhutan and Pakistan, represent a deep biocultural regional intelligence. The pastoral corridors they have made, often invisible in policy maps, are living threads of biocultural regional resilience, weaving together ecology, culture and livelihood in the fragile folds of the Himalayas. See <https://pastres.org/2023/08/25/pastoralism-in-himalaya-a-special-issue-from-south-asia/>

^{iv}At the beginning of the 21st century, South Asia's population was nearing 2 billion; it continued growing for some decades, but then stabilised as birth and death rates were equalised as in the rest of the world.

^vSee, for instance, <https://www.icimod.org/mountain/cbfews/>; <https://www.icimod.org/communicating-flood-early-warning-in-the-ratu-watershed/>; <https://www.downtoearth.org.in/climate-change/communication-gap-bihar-floods-show-why-india-nepal-need-to-get-their-act-together-65961>; <https://www.undrr.org/news/early-warning-systems-saving-lives-during-nepals-monsoon>; <https://indepth.lwr.org/technical-resources/six-pillars-transboundary-flood-resilient-community-executive-summary>; <https://rsdc.org.np/content-detail/51>; <https://www.sahbhagi.org/disaster-risk-reduction>; and <https://dialogue.earth/en/water/community-communications-save-lives-in-assam/>

^{vi}Bhatnagar, Manu and Poullose, Nisha Mary, 2022, *Uncovering Pre-district Bioregions of India*, South Asia Bioregionalism Working Group, <https://vikalpsangam.org/wp-content/uploads/2022/08/Final-Bioregion-Report-18-August-2022.pdf>

^{vii}'Porosity' here refers to the softening or withdrawal of cross-border restrictions and disruptions (ecological, cultural, economic) created by hard borders.

^{viii}See, for instance, *The Goba of Ladakh*, <https://vikalpsangam.org/article/the-goba-of-ladakh-report/>; or on the Dzomsa system of Sikkim, https://sikkimexpress.com/news-details/the-evolution-and-significance-of-the-dzomsa-system-in-sikkim-a-historical-perspective#google_vignette

^{ix} In the early 2000s, there was already a suggestion at the Nepali end to make this trijunction a jointly managed national park.

^xSee for instance: <https://theprint.in/india/symbolising-harmony-grand-mosque-temple-share-common-yard-in-j-ks-kupwara/1576237/>; <https://brighterkashmir.com/news/kashmiriyat-through-the-ages-a-historical-perspective-61298.html>; <https://www.youtube.com/watch?v=C8Ik1SwcSGg&t=13s>; and <https://www.youtube.com/watch?v=NLUUX2-wgzE&t=16s>. Kathmandu Valley's temples are both Hindu and Buddhist at the same time; and in many temples frequented by high caste Hindus, especially if associated with Tantrism, the priests are also Dalits and from Janjati (tribal) groups. In many parts of South Asia, temples, mosques, churches and places of worship of other religions have existed next to each other for centuries.

^{xi} Some early transboundary conservation initiatives in the early 21st century were already showing signs of success, such as the Terai Arc Landscape cooperation between India and Nepal (<https://gaiacompany.io/wildlife-corridors-explanation-examples-benefits/>), and the saving of an individual White-rumped vulture (a critically endangered species) in collaborative action between Bangladesh and India (<https://iucn.org/story/202410/wings-hope-transboundary-conservation-success-white-rumped-vulture>).

^{xii}For instance, traditional and new architectural techniques using mud, wood, bamboo, etc for decent and affordable housing; traditional and new hydrological sciences in achieving decentralized water security; and a package of organic cropping, agro-processing, and homestay visitation within ecological limits.

^{xiii}This builds on an early 21st century set of ethics developed in the Vikalp Sangam process in India, see <https://vikalpsangam.org/wp-content/uploads/2024/10/Alternatives-Framework-7th-Avatar-digital-v1.4.pdf>



Imagine South Asia without borders?

Imagine the South Asian subcontinent as a region where the current hard boundaries between nation-states become porous, fences being taken down and armed forces withdrawn? Where wildlife and people (including nomads and fishers) can go back and forth freely, where low-impact trade routes are re-established, where obstacles to the free flow of rivers have been removed, and where peace has replaced conflict across the region, including in border areas?

This booklet presents such a vision of South Asia in 2100. While utopian and dream-like in its vision, the narrative also shows glimpses of how we can get there, based on what already exists in the 21st century that provides opportunities. Transboundary cooperation, the assertion of radical democracy by communities, increasing understanding of ecological and cultural flows (past and present) across borders, are examples of these.

Read this visionary document, and if you want to get involved with translating it into action, do get in touch!



About South Asia Bioregionalism Working Group

The South Asia Bioregionalism Working Group, is a voluntary network of members re-imagining and working towards an ecoregional and bioregional governance for South Asia. It was initiated at a Democracy Vikalp Sangam (Alternatives Confluence) in October 2019. The ecologies, cultures, and economies of the region, have been contiguous and in mutual exchange for millennia, which the group aims to highlight through documentation, dialogues, and action.

<https://vikalpsangam.org/south-asia-bioregionalism-working-group/>



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