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STATES, MARKETS AND SOCIETY – NEW RELATIONSHIPS FOR A NEW DEVELOPMENT ERA

Editor **Melissa Leach**

Restoring Development *Dharma* with Toad's Eye Science?

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Abstract While the Millennium Development Goals (and their successors, the Sustainable Development Goals) loom large among those who take a global-level approach, they elicit, at best, a confused shrug from the Nepali villager. We unpack this paradox by way of the distinction between *eagle's eye science* and *toad's eye science*, and go on to show how vital it is that the latter is not neglected. It is, for instance, household-level decisions that have resulted in a substantial proportion of Nepali citizens working in the Gulf States and elsewhere, thereby quickly establishing a remittance economy that makes a nonsense of the long-held view, among the proponents of eagle's eye science, that it is lack of money that is the problem. Rather, it is the constructive engagement of the three 'solidarities' – market, state and civil society – that is needed: a task (we call it '*dharma restoration*') that simply cannot be accomplished without the bringing-in of toad's eye science.

Keywords: cultural theory, foreign aid, development, informal economy.

Ask any Nepali villager about the Millennium Development Goals (MDGs) and you will be met with a confused shrug. *Sahasrabdi Bikas Lakshya* – the goals translated into Nepali – is a mouthful that only classical Sanskrit scholars can properly articulate and understand. On top of that, it expresses a concern that has never figured in the everyday lives and decisions of these citizens. This may come as a surprise to those who focus on the MDGs (and on their successors, the Sustainable Development Goals (SDGs)) because Nepal is frequently cited at international gatherings as a country that, to use the old Soviet-era terminology, has 'over-fulfilled' its planned targets: all the way from female child school enrolment to infant mortality reduction and increased electricity access (NPC 2013; Alkire *et al.* 2015). Even more surprisingly, this success (if that is indeed what it is) has happened over the last decade and a half, during which time the country was engulfed in a Maoist insurgency, followed by an ongoing political and constitutional crisis that has seen nine prime ministers in almost as many years. Five-Year Plans, together with the aid programmes that are intended to prop them up, have stalled and the ratio of aid

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disbursement to aid commitment has reached an all-time low. And if we look at one of those 'successes' – electricity access – we find that this has happened even as those who are served (if you can call it that) by the national grid continue to endure power cuts for 15 hours a day. In consequence, the private sector – hotels, offices, shopping complexes and apartment blocks – have given up on the national grid and resorted to diesel generators. These generators, in total, now rival the supply via the grid, with the country spending some 137 per cent of its export earnings on the importation of this climate-unfriendly petroleum product.[1] So what, we should ask, is *really* going on?

Nepal, with its multitude of rivers cascading down the Himalaya, is indeed blessed with a rich hydropower potential.[2] However, even after more than a half-century of development assistance, that potential has not been realised. The official figure, according to the Nepal Electricity Authority (NEA), for the population's access to electricity in 2003 was just 18 per cent; in the same year the country's central bank (Nepal Rashtra Bank) declared, on the basis of its own survey data, that access was double that amount: 36 per cent. The NEA, it turns out, had taken the number of meters it had installed and then (assuming that these were almost all in households, with negligible numbers in government offices, hospitals and so on) multiplied it by the average Nepali family size of 5.5 persons. The Rashtra Bank, in its survey, had asked the simple question 'Do you have access to electricity?', without going on to enquire whether that electricity came from an off-grid community-owned micro-hydro installation, or was stolen from the grid (by creative hooking: 'unmetered consumption' in World Bankese), or from a privately-owned solar panel, or from a neighbour who was metered and (because you could not afford the NEA's installation charge) had let you pull a wire across for a couple of bulbs and charged you the going 'village rate'. Whether an MDG/SDG is being over-fulfilled or hopelessly fallen short of, evidently depends on which set of official figures you choose to consider.[3] With facts as malleable as that, you can have whatever you like!

1 Eagle's eye science versus toad's eye science

The NEA was using an *eagle's eye approach*, defining the problem from the high perches of its Kathmandu headquarters; the Rashtra Bank, though even more highly placed, was, it turns out, using a much more *toad's eye approach*: figuring out what was actually happening down there on the ground.[4] If you are working in a UN or western development agency, or a National Planning Commission, you will very likely gravitate towards the eagle's eye view, since your bosses will be thinking about policy measures at a global scale.[5] If, on the other hand, you are working for a village council you will probably see the problem not so much for its global consequence (climate change being the current favourite) as for how it matters for those who are suffering from it. We can mention a few instances.

Bihari Krishna Shrestha – the doyen of Nepal's ethnographers, and who can claim much of the credit for introducing to government policy the

Irrigation pump converted into a *Jugad* truck

Source DST (2008), reproduced with kind permission. Photographer M. Moench.

concept of 'user groups' in the forestry and health sectors – recounts how rice is grown at the highest altitude in the world in Jumla District: 6,000 feet above sea level, where rice normally should not be growing. A complex nexus of social and agricultural practices enables the Jumlis to make maximum use of the short summer: they first soak the seeds in gunny sacks in the river and then prepare the seedling beds, not in the open, but inside their houses and close to the hearth. They then spread branches over them, placing their bedding on top so as to allow their body heat to transfer to the seedlings. They also require all male members who have migrated out for seasonal labour to come back to the village for Chaitra 12th (around 25 March) for the transplanting of the seedlings. If they do not show up they face being declared dead, with their relatives being allowed to conduct their funeral rites. If any one of these complex and demanding practices fails, the entire system fails. None of this crucial knowledge is accessible by way of the eagle's eye approach; it is discernible only to those who take the toad's eye view.[6]

If a high-resolution satellite was hovering over Rajasthan it could clearly make out what it would think was a truck (see photo). It would take a toad's eye scientist, using ethnographic methods, to go down to the village level, look at the vehicle, talk to its owner and realise that it is actually an irrigation pump that has been fitted onto a makeshift chassis. With no registration plate, and no licensed driver, it is popularly known as a *Jugad*: literally 'make do with' (DST 2008). And there is a story behind this remarkable and now widespread innovation: India's Rural Development Bank, it transpires, gives subsidised loans to farmers to enable them to buy three-horsepower pumps. However, the farmers will even pawn their wives' jewellery so as to top up and buy a ten-horsepower pump. They know what India's central planners and economists don't: that a three-horsepower pump can only pump water for maybe 2,000 hours a year and will remain rusting in the shed for the remaining 6,740 hours, whereas a ten-horsepower pump can pump water *and* run as a truck, ferrying goods and earning money for the remaining part of the year. Again, these facts, crucial for development, can only be ferreted out through toad's eye science.

Much the same sort of story holds for domestic water supply in Nepal's Middle Hills, where villagers avoid drinking water from the streams

because they are often polluted with domestic and wild animal waste. Hill hamlets rely on nearby springs for their water supply. However, no proper study has ever been done on springs, nor has there been any attempt by the national authorities to map them. The assumption has been that the springs are simply *there*, with water supply projects being defined as the procurement and laying of PVC pipes from the springs to the settlements. 'Access to safe drinking water' is then seen as having been achieved, and it is on that assumption that the astounding increase in safe water coverage claimed by both national and international officials has been based: from 17 per cent to 90 per cent in the United Nations Development Programme's (UNDP) one International Drinking Water Supply and Sanitation Decade ending in 1990. Nepal would thus have 'over-fulfilled' its MDG (73 per cent coverage) almost before it had even been set! Pokhrel (2017, forthcoming) provides a more nuanced breakdown which shows, by way of field surveys, that the criteria – fetching time of less than 15 minutes, at least 45 litres per person per day, supply available even in the dry season and so on – are such that the chance of Nepal meeting this goal is vanishingly small. And newspaper report after report tell us that most of these water supply schemes that were built during the International Decade have already gone dry. Villagers call them *bikasey chihan*: 'development tombs'.

Since then, the springs themselves, from which the PVC pipes had been laid, have started drying up across the Middle Hills, with eagle's eye scientists quickly jumping to the conclusion that it is climate change that is to blame (in much the same way that, back in the 1980s, all the region's environmental woes were blamed on 'the ignorant and fecund peasant' cutting trees on fragile hill slopes and deforesting the Himalaya; see Thompson and Gyawali 2007). However, a toad's eye study (Sharma *et al.* 2016) has revealed that other drivers are responsible: rampant use of PVC pipes and electric pumps (where previously women carried water to their houses in pots and carried no more than was necessary); changed cropping patterns (a move away from dryland maize and millet and into water-intensive marketable vegetables); a decline in livestock-keeping and hence in wallowing ponds for buffaloes (which contributes to the recharge of the groundwater that fed the springs); the filling in of such ponds (for malaria eradication or for building schools thereon), and so on. True, climate change, when it eventually impacts, will likely make things worse, but it is these here-and-now drivers – drivers that are discernible only to those who take the toad's eye view – that need to be addressed. Eagle's eye science, by itself, will foster the delusion that, if it wasn't for climate change, all would be fine.

2 Economic growth, but not as planned

Even as many were celebrating the End of History (Fukuyama 1992) and the global triumph of the neoliberal and market-led order, Nepal saw its first communist prime minister (in 1994) and in successive elections the total parliamentary strength of parties with the words 'Communist', 'Marxist' or 'Maoist' in their titles has risen to almost two-thirds. Concurrently, almost 3 million Nepali citizens (out of a

total population of around 28 million) are working in the Gulf States, Malaysia and South Korea (up from around half a million in 2002, and not counting almost 6 million working in India as seasonal or long-term migrants from many, many decades back at much lower salaries).[7] With higher income remittances pouring back home, families have seen their incomes boosted: keeping them afloat in the midst of all the political chaos (and natural disasters: e.g. earthquakes) and enabling them to purchase better schooling and health services, along with food and consumer (and, in some instances, luxury) items. Remittances now make up almost 30 per cent of gross domestic product (GDP), but they are far from an unmixed blessing. The haemorrhaging of the country's youth, compounded by three million or more citizens having now migrated to Kathmandu and other urban centres from the rural hinterlands, has left many a village depopulated (apart from the elderly), the land uncultivated and the livestock much diminished: social dislocation at a scale and speed rarely experienced anywhere, outside of war. But, for all that, people are now much richer (or, at least, much less poor) than they were (see Shrestha 2017, forthcoming).

Nepal's banking system, including those institutions that provide microcredit to the poorest of farmers, has also expanded dramatically with remittance inflow: from 178 such 'outfits' in 2008 to over 13,000 in 2015 (see Chaulagain 2015). While the Nepal Rashtra Bank, understandably, is pushing for some merging and consolidation of these evermore numerous financial institutions, the country's banking system, unlike in so many other parts of the world, has certainly not had to be bailed out. Even more remarkably, given the political instability and high level of corruption, government revenues, between 2010 and 2015, have recorded an annual growth rate of 20 per cent. This has been largely thanks to the import and value-added taxes levied on many of the goods that have been purchased with the increased remittances, with internal uptake being as high as 90 per cent in 2014, with foreign grants falling to less than 9 per cent.[8] That a public call, aimed at raising 2 billion rupees for the construction of a hydropower plant, was over-subscribed by 42 billion rupees proves the point made by toad's eye scientists, but not their eagle's eye counterparts: that a lack of money – the premise on which the aid industry has been built and the recipient government's aid addiction fed – is no longer the problem.

3 Restoring the *dharma*, kicking the habit

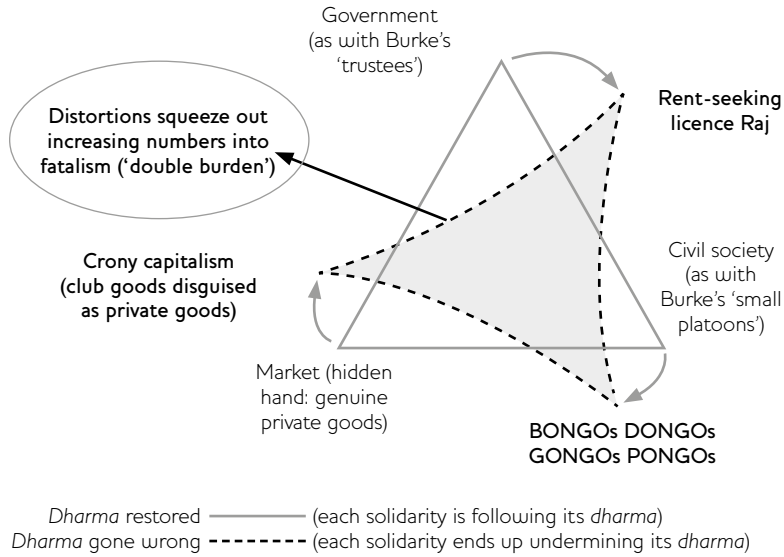
Some of us have argued that the Age of Aid ended (or at least lost its *élan vital*) with the collapse of the Soviet Union in 1989 (Sharma *et al.* 2004). Aid, as an industry, was born at the end of the Second World War, with the setting up of the Bretton Woods 'architecture' in 1944/5. An underlying goal, once the Cold War had taken hold, was to ensure that the 'Third World' did not become part of the 'Second World', and it was that imperative that gave us aid as we know it. But, after 1989, that imperative was no longer present, and the 'First World' was able to redefine development as something that could best be done by the market. The state, especially in the global South, was forced

into something of a 'hollowed-out' retreat, with structural adjustment programmes and the 'Washington Consensus' tightening their grip. A quarter-century on, there is now a growing realisation that this lurch into institutional monism has not delivered on its promise. And even the later correction that brought the state back in by way of PPPs – public–private partnerships – has proved inadequate. The public, at best, has been subsumed under the private; at worst, it has confirmed Karl Polanyi's fear that things will evolve into a kind of fascism in which the interest of the market overrides that of the society of which it should be just one vital part (Polanyi 1944).

A more wholesome (and more democratic) approach, we would argue, drawing on the *theory of plural rationality*,[9] is to go beyond both the monisms and the dualisms and look for a more pluralistic framing: a triad of public, private and civic engagement. This, we hasten to add, is not an entirely new idea. Polanyi (1944), for instance, saw the *exchange* of the profit-focused market being balanced by the *redistributive* interventions of the state only if both were being goaded by the *reciprocity* that is fostered by civic forces. And Lukes (2005) sees three types of power at work, each needing the others: the *persuasive* power of market seduction, the *procedural* coercive power of the state and the *ethical* power exercised, through moral critique, by truly civic movements (the 'small platoons', as Edmund Burke (1790) called them). And Nepal's Hindu Samkhya philosophers (Gyawali 2009), reaching back two-and-a-half millennia, distinguish between actors (*patras*) and the mix of subtle characteristics (*gunas*) that together give rise to the different powers (*shakti*). These are: *rajasik* (active), *tamasik* (brute and inert) and *satwik* (leading the ethical way, as it were, between *rajasik* inducement and *tamasik* threat). Indeed, Nepal's Constituent Assembly, elected in 2008 to frame the country's new constitution, debated the development model in these plural rationality terms and concluded that it would have to be led by all three of these primary forces: market, state and cooperatives (Figure 1).

In an ideal (that is, genuinely democratic) world – represented by the grey bordered equilateral triangle in Figure 1 – each set of actors (each *solidarity*, as they are called) follows its *dharma*: markets are competitive and efficient (with Adam Smith's 'hidden hand' ensuring that people do well only when others also benefit), governments behave (as Edmund Burke famously urged) as 'trustees' for the greater public good, and civil society's small platoons, lik e watchdogs, are perpetually alert to any signs of injustice (to both man and Mother Nature). However, in much of the global South, Nepal included, just one voice (the overbearing hierarchism of governments), or at best, some PPP duet, drowns out the civic voice that calls for fair play and moral accountability: '*dharma* gone wrong' (the distorted shaded triangle in Figure 1). Government bureaucracies morph into a rent-extorting 'licence raj', markets slide into a 'crony capitalism' in which their actors do well even when others most certainly do not benefit, and non-governmental organisations (NGOs), abandoning their higher cause, become conniving fronts for

Figure 1 ***Dharma*** and its dynamics



Source Gyawali, Thompson and Verweij (2017, forthcoming).

business and politics 'by other means'. Each solidarity thus ends up undermining its *dharma* – its distinctive righteousness – and is thereby corrupted in its essence. Development, this plural rationality framing insists, will remain elusive for as long as the *dharma* is unrestored: for as long, that is, as things are out-of-line with the grey bordered equilateral triangle in Figure 1.

For the *dharma* to be restored each solidarity has to be present at the policy table (have *accessibility*, that is) and also to be engaging constructively, albeit argumentatively, with the others (*responsiveness*, that is). This is because, even though they are mutually antagonistic in the way they are organised, each seeking to disorganise the others and perceiving the risks they face very differently, all three are essential to the body politic. Markets innovate (especially in the technological realm), hierarchies regulate (while also needing to innovate in order to address new challenges with new management approaches), and civic movements too need to find behavioural innovations if they are to identify and meet new dangers. That is where their strengths lie: in not doing what the others should be doing. And they would re-discover those strengths if each of them chose to practise some toad's eye science. What, for instance, is the vast informal economy of the global South doing? How are user groups managing complicated technologies such as electricity distribution, as the Mothers' Group[10] in Nepali villages are now doing? And why is it that radical ideologies, be they of a Maoist or more orthodox religious flavour, are finding so much resonance at the local level?

And what finally, returning to our starting point, does such a reorientation of thinking mean for the current global efforts in development? In

particular, what does it mean for the SDGs: the successors to the MDGs? Yes, those goals do matter, in so far as twenty-first century problems such as climate change, new pollutants, new diseases and so on are so immense and global in their scope as to be unsolvable without common effort, and such effort requires some common goals. No, they do not matter to the vast majority of marginal and poor farmers, who can be counted on to do what they perceive themselves as having to do anyway, SDGs not withstanding. And governments, as we have seen with remittances in Nepal, will find themselves struggling to catch up with the public mood and its often rapid swings. Maybe SDGs will also matter if lessons are learnt, past failures are critically analysed, and corrective measures are taken. Failure to do these vital things, however, will mean that development will be hijacked by the smoothest operators, with the goals being debased into platitudes and with ministries of SDGs popping up all over the world so as to give a sense – false, of course – of action. So, with these daunting tasks and alarming pitfalls identified, it is a fundamental re-thinking of development that is called for: a re-thinking that will place a sharpened, and often uncomfortable, focus on toad's eye science.

Notes

1 Survey conducted by Professor Amrit Nakarmi of the Centre for Renewable Energy, Institute of Engineering, Tribhuvan University, Kathmandu and presented at the 41st *Pani Satsang* (public policy discourse forum) on 'Carbon Neutral Pathways in Nepal with Special Focus on Ropeways and Electric Transport' by the Nepal Water Conservation Foundation, Nepal Academy of Science and Technology, LUCSUS/Lund University and Toni Hagen Foundation on 23 November 2014. See also www.ktm2day.com/2012/05/07/diesel-provides-531-mw-of-electricity/.

2 Nepal's national grid, with a capacity of about 800+MW, is mostly hydro (some 700MW) that took over 100 years to develop since 1911 when electricity was first generated in Nepal. Since 2008, with increasing power cuts plaguing the national grid, private enterprises have resorted to installing diesel generators that now total almost 700MW (and growing). Hydro development programmes supported by foreign aid agencies, as well as by the Nepal government and private developers are mired in conflicts, cost and time over-runs, political extortion and interference, and a host of other ills.

3 One of us (DG) was Minister of Water Resources then and *ex-officio* chair of the NEA board where the first reaction to this new figure from the Rashtra Bank was: 'Look at how many people are stealing our electricity!'

4 The term 'toad's eye' is borrowed from Rudyard Kipling (1919: 53): *The toad beneath the harrow knows where every separate tooth-point goes*. The next line describes our 'eagle's eye': *The butterfly upon the road preaches contentment to that toad.*

5 In the case of Rashtra Bank's fortuitous use of toad's eye science, the wider policy implications are immense regarding the decentralisation and democratisation of the electricity grid. However, they were

not the Bank's concern (they still are not, as they still are not of the energy ministry or the international development agencies supporting the government) but they are among reformers, who use them to point out the anomalies in the centralised system.

6 Recounted by Bihari Krishna Shrestha (at a Fulbright/ICIMOD/NWCF meeting on the water–energy–food nexus) based on his earlier ethnographic work in Jumla (see Vasily *et al.* 2015).

7 See DoFE (2014) as well as the Centre for the Study of Labour and Mobility website (www.ceslam.org).

8 See MoF (2015). In that year, recovery of irregularities and defaults also jumped up to one and a half per cent of the total government revenue.

9 This integrative social science theory, originally developed by Mary Douglas, goes by various names, including cultural theory and neo-Durkheimian institutionalism (Douglas 1986; Thompson, Ellis and Wildavsky 1990; Verweij and Thompson 2006; Thompson 2008; Thompson and Beck 2015).

10 Mothers' Group (in Nepali *Aama Samuha*) is a civic self-help users' group movement in rural Nepal that organises women to manage their pressing needs, from childcare and cooperative shops to electricity distribution (see Gyawali 2014).

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