## FOREWORD

n 2013, environmental issues reached a crucial crossroad. On one hand, there was greater awareness of, and demand and protest for safeguarding natural resources. On the other, there was a much louder call for taking down the regulatory system that protects green concerns. As I write this, at the end of 2013, the 'development' lobby seems to be winning this battle. There is an all-out attack on the controls that assessed projects — everything from buildings to dams — for mitigating environmental damage. The question is, why have we come to this situation? What should be done to ensure environmental issues are not sidelined?

It is important to understand where we are going wrong. Just think of last year: you will hear a cacophony. There was huge dissent about the way we are mismanaging coal reserves; the Supreme Court shut down iron ore mining in Goa; later in the year, there was outcry about rampant and rapacious sand mining and the havoc it is reaping on rivers. There were equally loud calls for the need for hydropower projects in the Himalaya to be shut down and for mines in the forests of Central India not to be reopened. Or that vast stretches of bio-diverse rich Western Ghats should be declared an ecosensitive zone, shutting off huge areas from mining, industries and even plantations and settlements.

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In this way, the polarisation was absolute. In my view, this has not benefitted the environment's cause; it has certainly not changed the way we will manage our natural resources for sustainable and inclusive growth. This impasse does not work.

But by the end of the year you find that most action has either not been taken; or steps have been reversed. It is business as usual. In Bellary, all the iron ore mines closed after gross environmental violations, have been reopened. The only difference is that some mines have paid a penalty for illegalities and all have agreed to follow a plan for environmental restoration and will not indulge in unseemly activities. But the institutions for checking reformed miners are still in disarray; which means, little will actually change in Bellary. The miners will flex muscles again (after a suitable wait) to extract more iron ore than they should; degrade the land and water; encroach on forestland; and cheat the exchequer by hiding the value of their exports. Business as usual will prevail.

Similarly, mining of sand continues unabated and with rapacious speed in rivers. But because the Supreme Court directed that minor minerals (sand and even mud) would require environmental clearance, state governments process paperwork. But the fact is that this mining activity is scattered, small and unorganised. So either mining continues as before — only this time with the stamp of clearance — or it moves to the illegal dark side.

## To dam or not

So, even where action is taken, it is not working to safeguard the environment. Take the issue of hydroelectric projects in the Himalaya. The dam builders-engineers lobby wants no restraints on construction of projects in this fragile ecosystem. In the Ganga basin alone, some 70 projects were on the cards to generate 9,000 megawatt (MW). These projects together would 'affect' — humanly reengineer — some 60-90 per cent of the river's length and would dry up stretches completely. There was no method in this madness.

On the other side, there were equally strong views against construction of hydroelectric projects. The arguments ranged from religious beliefs (construction would harm Ganga's purity) to environmental concerns (about the vulnerability of the Himalaya). The disaster that shook the mighty Himalaya killed over 10,000 people and brought down buildings like a pack of cards. The ministry of environment and forests (MoEF) stepped in and declared some part of the area along the Bhagirathi river and its catchment as eco-sensitive zone. Under this notification, no hydroelectric projects would be allowed and construction of any other buildings would require permission from the ministry.

But this is not tenable. The ministry has no capacity to take environmentally sound decisions while awarding clearances to projects. It cannot implement the eco-sensitive zone notification. Worse, the notification in its current form will only lead to more corruption during clearances. In all this over time, all the dams will be back. The Himalaya will become even more vulnerable and damaged. Local

So in 2014, we need a different and more nuanced approach. In this case, it would mean accepting



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the fact that producing energy from flowing rivers is both a clean and renewable source of power as well as an important resource for Himalayan states. It cannot be argued that no dam should be constructed. But projects that kill the river or damage the ecosystem should not be allowed. And this can be done. For instance, we at Centre for Science and Environment have done exhaustive calculations that show that rivers can sustain generation of hydropower, provided there is agreement to set aside 50 per cent of the total flow for six months of the lean season and 30 per cent during high discharge monsoon season. Hydropower projects would need to be re-engineered so that they utilise water that the river can afford to part with — and not take all it has. Our estimation is that this will mean reduction in the number of projects but it will still mean the region will generate substantial power. In addition, we advocated that small hydroelectric projects — defined as up to 25 (MW) could not be considered green unless their construction was strictly regulated. Small is not necessarily right and green. In all this, the first right to energy should be given to people who live in the Himalaya.

## Western Ghats: all is nothing

In mid-2011, a panel headed by ecologist Madhav Gadgil submitted a comprehensive report on protection of Western Ghats. The Ghats are a biological treasure trove, spread over some 130,000-160,000 ha (depending on the definition used to delineate the ecological region). The MoEF first suppressed the report for months, till courts directed it to take action on the recommendations. It then set up a committee, headed by planning commission member K Kasturirangan to advise it on the next steps that needed to be taken.

In April 2013, Kasturirangan committee (of which I was a member) submitted its report to angry rejections from both sides: ecologists who supported the Gadgil report and a combine of industry and politicians who want no special protection for the region.

The key differences between the Gadgil and Kasturirangan reports are three-fold. One, the extent of the area that would be protected under the eco-sensitive zone: the Gadgil report required the entire area of the Western Ghats (roughly 130,000 ha) to be declared eco-sensitive zone (ESZ). The Kasturirangan panel used finer remote sensing technology (24-metre resolution against 9 km used in Gadgil report) to identify human dominated land use of settlements, agriculture and plantations (other than forest plantations). This cultural landscape was removed from the protection regime and only areas identified as natural landscape was recommended to be declared eco-sensitive areas (ESAs). This meant that 37 per cent of the Western Ghats would be under a strict protection regime. The extent of the area was still massive (60,000 ha) but it would not involve setting up a prohibitory regime in lands which were already modified by human intervention.

The third crucial difference between the two panels concerns the activities and institutional mechanism to regulate protection in the zone. The Gadgil committee contains a detailed list of activities: from banning genetically modified crops to decommissioning of dams and removal of plantations, which would not be permitted in the three zones, classified based on their level of ecological sensitivity and biodiversity. To regulate this permit and prohibition system, it recommended setting up a national authority, along with counterparts at the state and district levels. The list of activities includes ecology committees, which would take decisions regarding the permits.

The Kasturirangan committee has recommended a non-tolerance policy only with respect to highly interventionist and environmentally damaging activities like mining. These would be either completely banned in the eco-sensitive area or would require very tough conditions for clearance. The committee, instead of setting up a new national authority for regulation of the permit and permission system, decided to strengthen the existing framework of environmental clearances. Many ecologists view this as a dilution of the Gadgil report.

The fact is, there was no chance the Gadgil report would have been accepted, given the scope of the area and the nature of prohibition required. And therefore, the objective of the Kasturirangan panel to find a way to protect the areas still untouched is a way ahead. But there are more serious questions for future policy. I have misgivings about the capacity and ability of governance systems to regulate protection in such a manner. The experience with declaration of eco-sensitive zones shows clearly that the method of environmental management, through prohibition and fiat, is often detrimental to the interests of the very people and environment policy it is aiming to protect.

Even Madhav Gadgil summarises the poignant case of a strawberry farmer and rose cultivator, who suffered because of this highly centralised law. The farmer was not allowed to construct temporary sheds or cowsheds in the name of this law, even as large constructions came up illegally. Similarly, in the eco-sensitive zone located near a sanctuary, poor tribals were stopped from using



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kerosene lamps for lighting. This, because forest department officials had merrily interpreted the provision in the notification, which says that no large-scale artificial lights would be allowed (which would disturb animal habitats), to ban kerosene lamps. Will such a regime based on rigid bureaucratic controls and combined with weak institutions for governance not be easily subverted and work against the interests of the poor and the environment?

Therefore, we need different ways of governance in the coming years. The Western Ghats, even in areas categorised as natural landscapes, is inhabited. It is not possible to plan for the Ghats only as a fenced-in zone. Within the area defined as ESA, there are some 4,149 villages. The people living in these settlements have undoubtedly built a relationship with the natural environment. However, these practices need to be supported. This is what the Kasturirangan panel has recommended: make conservation work so that people and economies benefit.

## Institutions for new-gen governance

But any change we desire in 2014 and beyond is not possible if the institutions for regulation, monitoring and enforcement are not substantially revamped and strengthened. Balance between environment and development requires working institutions that can be trusted to take carefully evaluated decisions. More importantly, the institutions should be able to enforce the conditions laid down at the time of clearance so that devastation is mitigated, if not managed well.

But we don't have such institutions. Instead, there is a growing noise that environment and forest clearances are holding up growth. So, there is a frantic rush to clear everything in sight. But will this repair the economy?

The fact is that clearances have never been the problem. In the past five years, the ministry has granted sanctions to so many projects that we should have doubled or tripled the capacity in most cases. But we have not, because there are other unresolved issues — from finance to building projects against the will of communities. If we are serious about doing something, then this is where we should focus. First, we should invest in institutions that will provide oversight. This means doing what we mostly avoid: repair what is broken. Pollution control boards remain under-staffed, under-funded and abused by all. But we build new agencies, deluding ourselves that they will take care of all the troubles. The National Green Tribunal has been set up. Now this tribunal needs scientific information, monitoring data and assessment. It has nobody to call upon but the same defunct pollution control boards, so decision-making is seriously impaired. It is a joke.

Second, we should set straight the system of clearances. Currently, the entire structure is built on a few committees, manned (since there are very few women) by faceless and mostly retired bureaucrats and other sundry types. The institution is unaccountable. It is supposed to "assess" projects spending on an average a few minutes on each file — and then take decisions. It will ask many questions and hold many meetings. Finally, it will clear all the projects but with tough environmental conditions. This, when it knows that there is no monitoring mechanism to check even one of the 100 conditions it imposes.

This is what needs to be reformed, revamped and improved. This will require taking tough positions on strengthening the existing system — bringing in more specialists and streamlining processes so that environment, forests, wildlife and coastal clearances are assessed for cumulative impact. Most importantly, we need people to monitor post-clearance performance. We need to tighten enforcement. And we cannot do this without strong regulatory institutions.

All this needs a three-pronged approach. One, we need to make clearance assessment more coherent and comprehensive by simply linking environment, forests, coasts and wildlife of each project. Two, bring much greater transparency in decision-making by making public hearing and prior informed consent processes open and visible and by ensuring that committees assessing projects are accountable. Three, bring sharp and total focus on monitoring for compliance and enforcement and build capacity to do this. This would require pollution control boards to be revamped and strengthened. It would also need investment in monitoring systems that allow people to know about the state of their forests, river or air.

In 2014, it is time we took the crucial next step on environmental management — build institutions that can bring the discourse to fruition. This is the agenda for the future.

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